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ORIGINAL COMMUNICATIONS.

Ovarian Dropsy, treated by tapping and injection of Solution of Iodine.

In the number of the Medical Examiner for June, 1846, we published an account of a case of Ovarian Dropsy by Dr. B. A. Allison, of Spencer, Indiana, in which, after repeated tapping, he injected a solution of iodine into the sac. The novelty and boldness of the operation and its apparent success, excited much attention at the time, and the paper was extensively copied, with various comments. Under these circumstances, the following extract of a letter received from Dr. Allison, dated June 11, 1847, will be read with interest, and perhaps lead to a further trial of the practice which in his hands seems to have been eminently successful.

"Soon after the date of my letter to you containing an account of the case of Mrs. C—— (May, 1846,) her menses returned, and have continued regular ever since, and she has enjoyed as good health as any woman in the neighbourhood, excepting that the orifice, where tapping was performed, is not entirely closed yet, and occasionally discharges a few drops of healthy pus. A curious feature occurred in her case soon after she began to take exercise—her lower extremities became affected with numerous large, spreading and obstinate ulcers, which yielded, however, in time, to the bandage, and occasional application of the citrine ointment."

BIBLIOGRAPHICAL NOTICES.

SYDENHAM SOCIETY. *The Works of William Harvey, M. D., Physician to the King, Professor of Anatomy and Surgery to the College of Physicians. Translated from the Latin, with a Life of the Author.* By ROBERT WILLIS, M. D., Member of the Royal College of Physicians and Surgeons of England, Corresponding member of the Royal Academy of Sciences of Göttingen, &c. 8vo. pp. 624. London, 1847.

It was but right, that one of the earliest labours of the Sydenham Society should be directed to the preparation of a complete edition of the works of the great Englishman, whose discovery of the complete circulation of the blood has immortalized his name; for whatever may be the disposition—and a proper one it is—to do justice to the predecessors of Harvey, it is pretty universally admitted, notwithstanding the views and arguments adduced by our learned and venerable friend, Dr. Cox, that the perfection of the great discovery was his; and when, it may be asked, has a discovery of the kind ever been made *de novo?* Observation after observation has usually been registered for a long period; until ultimately some one has topped the pyramid, and completed the undertaking; whilst, as in the case of every great discovery or invention, the surprise has been, that so apparently simple a result should not have been attained by hundreds as well as by the 'lucky' individual who made the last and most important step.

It was not—as we have previously said, when noticing this same subject—the person who first discovered the propulsive power of steam, or even he who first rudely applied it to the formation of an imperfect engine, that deserved the credit of that wonderful result of human ingenuity—the steam engine; but the man who, like Watt, made it a master-piece of mechanism; or, like Fulton, showed that it could be applied so wonderfully and fearfully to the purposes of navigation.

The editor of the edition of Harvey's works, now before us, with much self-complacency—which is, indeed, too apparent throughout his preface—flatters himself, that he has "set his [Harvey's] claims to the whole and sole merit of the discovery of the circulation in a new and clearer light than they have yet been seen;" and that he has done "more than any preceding biographer in exhibiting his moral nature; for truly he was as noble in nature as he was intellectually great." p. viii.

Dr. Willis gives, at considerable length, the views of the predecessors of Harvey, as well as of his opponents—contemporaneous and others—on the great question of the circulation. His predecessors, doubtless, paved the way for the ultimate discovery; and we would pause, therefore, before assenting to Dr. Willis's conclusion, that Harvey has "claims to the whole and sole merit of the discovery of the circulation." Indeed, Dr. Willis is scarcely consistent on this point, for in alluding to the views of Fabricius of Acquapendente, who had given especial attention to the valves of the veins, he adds:

"Fabricius could observe, and he could describe; but he wanted the combining intellect that infers, the imagination that leads to new ideas—to discovery. Though he did little himself, however, to advance the sum of human knowledge, he proved a tooth in the wheel that has since put in motion the whole machinery of medical science (?). He it was who sowed the seed, little dreaming of its kind, which, finding one spot of congenial soil, sprang up a harvest that has continued to nurture the world of physiological science to the present hour."

We have looked carefully over the remarks of Dr. Willis on this formerly much contested subject: but we confess, with every disposition to render him ample justice, we cannot arrive at the conclusion, that he has "set Harvey's claims to the whole and sole merit of the discovery of the circulation in a *new* and *still clearer* light than they have yet been seen." We are unable to discover the *new*, and it is not a more easy matter to detect the *still clearer*, for which he asks credit. The "excellent summary"—as he properly terms it—of the entire doctrine of the circulation by Dr. Freind in his Harveian oration, appears to us

more novel, and at least as clear. To this Dr. Willis refers his reader for other information—adding, neither in the proper spirit of courtesy nor of philosophy—

"I pass by the s ill-recurring denials by obtuse and ill-informed individuals, of the truth, or of the sufficiency of the evidence of the truth, of the Harveian circulation. Those who *can* not see, must, contrary to the popular adage, be admitted to be still blinder than those who *will* not see."

The following is Dr. Willis's conclusion :

"Having now disposed of the claims that have been set up in behalf of one or another, as the discoverer of the circulation, and shown, we trust satisfactorily, that these are alike untenable, we should now proceed to discuss the question of cui bono?—but this meets us in so forbidding an aspect, brimful as is our mind with a sense of the all-importance of the knowledge we had from Harvey, and seems so little to belong to our subject, that we gladly pass it by unnoticed ; though it be only to find ourselves encountered by that other topic, but little more congenial to our mood of mind and intimate persuasion—the merit of Harvey as a discoverer. Few, very few, have been found to question this ; but as one man of undeniable learning and eminence in his profession,* has very strongly, it seems to us, been led to do so, it will not be impertinent if we cast away a few words on this matter.

Discovery is of several, particularly of two kinds ; one sensible or perceptive ; the other rational or inductive ; the former an act of simple consciousness through an impression made on one or more of the senses ; the latter a conclusion come to by the higher powers of the understanding dealing with data previously acquired by the senses and perceptive faculties. We look through a telescope, for example, and we perceive a star which no one had seen before ; we note the fact, and so become discovers of a new star. The merit here is not, surely, very great, though the added fact may be highly important. Again ; one of the planets is subject to such perturbations in its course that to compose exact tables of its orbit is held impossible. These perturbations are referable to none of the known perturbating causes. A great astronomer suggests the influence of an exterior and unknown planet as their cause. A consummate mathematician and

* Dr. William Hunter. Introductory Lectures, p. 59, (4to. London, 1784,) to which the reader is referred for a singularly inconsistent and extraordinary string of passages.

physical astronomer makes trial of this suggestion: he assumes the ascertained perturbations as elements; he combines these under the guidance of knowledge and reason, and at length he says, that if the course suggested be well founded, there or thereabouts it must exist; and lo! on turning the far-seeing tube to the point in space he had indicated, there in verity gleams a new world, then first seen, though launched by God from eternity to circle on the verge of our creation; and he who bade us look, became the discoverer of a new planet. Who will dispute the merit here? Truly, man does show the God within him when he uses his faculties—God-like in themselves—in such God-like fashion. But Harvey's merit, according to our idea, was of the self-same description in another sphere. The facts he used were familiarly known, most of them to his predecessors for nearly a century, all of them to his teachers and immediate contemporaries; yet did no one, mastering these facts in their connection and sequence, rising superior to prejudice, groundless hypothesis and erroneous reasoning, draw the inference which now meets the world as irresistible, until the combined mind of Harvey gave it shape and utterance. To our apprehension Harvey was as far above his fellows, as the eye of poetic intelligence, which exultingly absorbs the beauties of the starry sky, and the green earth, is above the mere physical sense which distinguishes light from dark. The late Dr. Barclay, a fervent admirer of Harvey, whose name he never uttered without the epithet immortal, has put the question of Harvey's merit both happily and eloquently, and it affords us pleasure to quote the passage from the writings of our old and honoured teacher in anatomy. "The late Dr. Hunter," says Dr. Barclay,* "has rather invidiously introduced Harvey along with Copernicus and Columbus, to show that his merit as a discoverer was comparatively low. But what did Copernicus, and what did Columbus? Not in possession of more numerous facts than their contemporaries, but endowed with nobler and more vigorous intellects, the one developed the intricate system of the heavenly bodies, and the other discovered an unheard of continent. Was it not in the same way, by the exertion of superior intellect, that Harvey made his immortal discovery? I know not what has happened in the world unseen; but if I may judge from the records of history and the annals of fame, the spirit of Bacon, the spirits of Columbus, Copernicus and Newton, have not been ashamed to welcome and associate with the congenial spirit of Harvey." To this fine passage there is little to be added: Harvey's discovery

* On the Arteries, Introduction, p. 9.

was of the rational and inductive, and therefore higher class, according to our estimate; it was made in virtue of the intellectual powers which peculiarly distinguish man in a state of the highest perfection."

The volume before us, after the Preface, Life of William Harvey, and his last will and testament, contains "An anatomical disquisition on the motion of the heart and blood of animals;"—"The first anatomical disquisition on the circulation of the blood, addressed to John Riolan;"—"A second disquisition to John Riolan; in which many objections to the circulation of the blood are refuted;"—"Anatomical exercises on the generation of animals; to which are added essays on parturition; on the membranes and fluids of the uterus, and on conception;—Anatomical examination of the body of Thomas Parr; concluding with sundry letters on matters of science, addressed to Dr. Caspar Hofmann, Paul Marquerd Slegel, John Nardi, R. Morison, John Daniel Horst and others."

The works of Harvey were written originally in Latin; but most of them were rendered into English; so imperfectly, however, in some cases, that Dr. Willis says he undertook the task of translating them anew. The "masterwork" of Harvey on the motion of the heart and blood, he found to "have been translated by one but little conversant with the subject," and "that it was both extremely rebutting (?) in point of style, and full of egregious errors," so that "nothing short of an entirely new translation could do justice to this admirable treatise, or secure for it, at the present day, the attention it deserved."

The work on generation he likewise translated over again, as well as that on the anatomy of Parr. The letters have never appeared in English before.

We have not had time to compare Dr. Willis's version with the original, in order to decide whether he has avoided the charges he has laid against his predecessors. It becomes him, however, to have been extremely cautious; and we cannot avoid thinking that the fact of his having entirely retranslated works which had been generally received as correct versions of the original, savours not a little of the self-complacency to which

we have before alluded; as well as a desire to absorb the whole credit;—seeing that it would have been easy for him to have compared the original with the translation, and to have corrected anything "rebutting" in the style; or any inaccuracy in conveying the meaning of the author; and we must say, in conclusion, that whilst we hail with unallayed pleasure this edition of the works of one of the shining lights of medical science, we are by no means satisfied that the best possible selection has been made of Editor.

Observations on Aneurism, and its Treatment by Compression. By O'Bryen Bellingham, M. D., Edin. Fellow of and Professor in the School of the Royal College of Surgeons in Ireland, etc. etc. etc. John Churchill. London: 1847.

In this interesting *brochure*, Dr. Bellingham gives us a brief history of the treatment of Aneurism by Compression, and the various improvements in the mode, accompanied by an abstract of the cases that have been reported in which compression has been used; the instruments employed, and the theories upon which compression has been supposed by different writers to cure aneurism.

"The author's views respecting the pathology of aneurism, particularly the exact manner in which the disease is cured, differ from those usually taught;" and he has endeavoured to prove that "the cure of aneurism is accomplished in a similar manner, whether the ligature is employed or compression is used, or whether the cure has been brought about by Nature's unaided efforts." That the latter is true, is highly probable, from the uniform simplicity observed in the processes of Nature on other occasions, and the explanation of our author, which we shall notice presently, is at least plausible. The employment of cutting instruments upon the living body, where it can be avoided without incurring other or greater evils, is always to be deprecated, and every plan which holds forth a reasonable hope of relief without such a resort, is entitled to calm and impartial consideration. The result of all the experiments for the cure of aneurism by compression, has not been such as to warrant our confidence in relying upon it in the generality of cases; but if

it can be shown that a false theory has been entertained on this subject, under the guidance of which an erroneous practice has been pursued, the case becomes altered in its aspect most essentially.

The objections that have been urged against compression by authoritative writers are principally the following :

1st. Uncertainty of success, from the impossibility of applying sufficient force to bring the sides of the vessel into contact, so as to cause adhesive inflammation and consequent obliteration of its cavity, in many instances from its being surrounded by soft and elastic tissues that take off the pressure.

2d. Impossibility of continuing the pressure long enough to be effectual, in consequence of the extreme suffering of the patient from compression of the large nerves which accompany all the principal arteries.

3d. Danger of sloughing, in consequence of the long continued pressure.

All these evils have undoubtedly been experienced, and the question is, whether, according to Dr. Bellingham's theory, and the practice founded upon it, success can be attained without such risks.

"Surgical writers appear," says Dr. B., "to have been under the impression, that in order to cure an aneurism by compressing the artery above the tumour, it was essential to interrupt completely the current of blood through the vessel—in fact, to to apply such pressure as would act like a ligature, cause inflammation of the coats of the artery at the part, and obliterate the circulation in the vessel at the point to which compression had been applied.

"When it was considered absolutely necessary for the success of compression, that such an amount of pressure should be applied as was almost certain to produce sloughing of the part, and very certain to occasion intense pain and suffering; and when, in addition, this was to be prolonged through five successive nights and days, (as in the case reported by Mr. Guthrie) we can readily understand why patients refused to submit to it, and we can easily account for the disrepute in which the practice fell; and for the unwillingness of surgeons to adopt this treatment, in preference to the simple operation of placing a ligature upon the femoral artery. It would, however, appear that it is not at all essential that the circulation through the vessel leading to the aneurism should be completely checked, but rather the con-

trary: it may, perhaps, be advantageous at first, for a short period, by which the collateral circulation will be more certainly established; but the result of this case, if it does no more, establishes the fact, that *a partial current through an aneurismal sac will lead to the deposition of fibrine in its interior, and cause it within a few hours to be filled and obstructed, so as no longer to permit of the passage of blood through it.*

Pressure, so as altogether to obstruct the circulation in an artery, must necessarily be slower in curing an aneurism, as it must, in some measure, act by causing obliteration of the vessel at the part to which the pressure has been applied; whereas *a partial current through the sac enables the fibrine to be readily entangled in the parietes of the sac in the first instance, and this goes on increasing until it becomes filled;* the collateral branches having been previously enlarged, the circulation is readily carried on through them."

Several cases are narrated by the author, wherein these results of moderate compression were proved to have taken place, by post mortem inspection of the parts.

That aneurism may be cured in the manner recommended by Dr. Bellingham is admitted by eminent living surgeons, but the priority of the practice as well as the theory is not so readily accorded to him. Mr. Wilde, the able editor of the Dublin Quarterly Journal, awards the credit to the late Mr. Todd of that city. Professor Syme of Edinburgh, whilst he denies to Dr. B. any just claims to originality, condemns the practice as inapplicable to aneurism of the large arteries generally, although he admits that, in certain cases, where for special reasons the ligature cannot be used, compression should be tried.

If the doctrine contended for, however, and which it is not difficult to test, shall be established by sufficient observation, we can see no reason why compression should not supersede the knife and the ligature in nearly all cases, and should Dr. Bellingham's earnest advocacy be productive of so good and desirable an improvement, he will indeed have earned a proud claim to our gratitude.

The following remarks, extracted from Chapter X., present a *resumè* of the positions assumed by Dr. B.:—

"When we consider how many writers have devoted their attention almost exclusively to the subject of aneurism, and how much talent has been engaged in illustrating its history, patho-

logy, and treatment, it appears strange that the process which nature herself sets up for its cure should have been so much overlooked hitherto by surgeons; and although this process was daily, I may say, passing under their eyes, that the exact mode in which it was accomplished should have attracted but little attention, and no attempts should have been made to imitate or assist it.

In almost every case of aneurism, where the disease has subsisted for some time, we find a larger or smaller amount of solid matter deposited in the sac, which is composed of the fibrine of the blood, arranged in regular concentric laminæ.

Examples of the spontaneous cure of aneurism, in which the sac is completely filled with fibrine deposited in regular concentric layers, are not very uncommon.

Again, in cases of valvular or other disease of the heart, when a considerable impediment exists to the circulation through its chambers, we know that the fibrine of the blood will separate from its other constituents, and form the bodies improperly termed polypi, (which are sometimes so closely interwoven with the carnæ columnæ and chordæ tendineæ as to be with difficulty detached,) which, by closing the orifices, or obstructing the action of the valves, not unfrequently prove the immediate cause of death.

These familiar facts all tend to prove—

1st. That nature herself sets up a process by which, under favourable circumstances, the cure of aneurism is effected.

2d. That the mode in which she effects this, always in internal aneurism, and frequently in external aneurism, is by the deposition of the fibrine from the blood in the sac of the aneurism, until it becomes filled.

3d. That the fibrine in such cases is deposited in regular concentric laminæ, the oldest or first formed next the sac, those most recently formed nearest the centre.

4th. That a current of blood through the aneurismal sac is a necessary agent in bringing about this result.

5th. That any obstruction to the current by which its velocity and amount are diminished will accelerate the deposition of fibrine in the aneurismal sac.

6th. That once this process has commenced, if the same agents continue in operation, it will go on until the sac becomes filled, and no longer permits of the entrance of blood.

Writers upon aneurism hitherto appear to have been more intent upon solving unimportant points connected with the distinction between true and false aneurism; or in ingenious speculations as to the comparative frequency of aneurism from dilatation of all the coats of the artery, or from rupture of the internal

and middle coats, than in investigating the mode in which a spontaneous cure of the disease takes place. Indeed so little notice is taken of this process in some modern works, that one would suppose the authors were either ignorant of the facts just stated, or looked upon the phenomena as too unimportant to dwell upon.

Before proceeding further, there is a point upon which I wish to make a few remarks. In the details of the cases of aneurism treated by compression which have been published within the last three years, the writers speak of the coagulation of the contents of an aneurismal sac, or of developing a coagulum in it by pressure upon the artery at the cardiac side, as if a coagulum or clot, and the concentric laminæ of fibrine which form in aneurisms, were identical : indeed, from the loose manner of expression adopted, it is sometimes difficult to tell whether the writers are aware of the distinction between them. This is the more remarkable, because the two substances in appearance, colour, and consistence, present a remarkable contrast ; the one being soft and loose, of a very dark colour, not deposited in any regular order, and composed of the red globules and fibrine of the blood ; the other being solid and firm, of a paler colour, deposited in regular concentric laminæ, and composed of fibrine alone, or with a very small proportion of the red globules. The former is commonly found in the auricles of the heart, and in the large veins which open into them, and is familiar to every body; the latter constitutes the solid matter, which, in greater or less quantity, fills the sac of old aneurisms.

It is obvious, therefore, that the mode in which these two different deposits are formed cannot be the same. To cause the deposition of fibrine in an aneurismal sac, it is essential that a stream of blood should pass through it for a period that will vary according to different circumstances; but its deposition will be promoted or encouraged by diminishing the strength of the current in the artery leading to it, and by lessening the amount of blood which passes through the sac. This, it is easy to understand, can be readily accomplished by compressing the artery at the cardiac side of the aneurism, and the pressure need not be so strong as to occasion very great pain to the patient.

On the other hand, to bring about the coagulation of the contents of an aneurismal sac, the blood must remain at perfect rest for a considerable time ; if a current continues to pass through the sac, the blood in it will be replaced by another portion before there is time for its coagulation ; for although a coagulum or clot will quickly form when blood is removed from a vein, it is not so easy a matter to bring about its coagulation in an aneurismal sac in a living subject. To effect this, very considerable pres-

sure would be necessary; the compression likewise, it appears to me, would require to be made upon both the cardiac and capillary side of the sac, and very near the latter; while the process will necessarily be so painful that few patients would be willing to submit to it.

It would appear then—

1st. That it is not by the formation of a coagulum in the aneurismal sac that nature effects the cure of the disease, but by the deposition of the fibrine from the blood which circulates through the sac.

2d. That simply diminishing the current will not cause the coagulation of the contents of an aneurism, but it will occasion the deposition of fibrine in the sac."

Lectures on Subjects connected with Clinical Medicine. By P. M. LATHAM, M. D., Fellow of the Royal College of Physicians, and Physician to St. Bartholomew's Hospital. Second edition. 8vo. pp, 158. Barrington & Haswell: Philadelphia, 1847.

We are pleased to see a second American edition of the lectures contained in this volume. Few medical writers of our day equal, and none excel Dr. Latham, in clearness and conciseness of expression, aptness of illustration, or justness of the views he inculcates.

The volume before us consists of fifteen lectures on various subjects—all deserving of the greatest consideration. The first is "On the Education of Medical Men," and presents the clearest and soundest view of the subject we have ever read—no sophomore declamation, but sound, common sense reasoning. A short extract or two will show the author's style, and something of his views on this subject.

"There is no subject which at this time more needs the consideration of sober-thinking and reasonable men, than that of professional education.

The subject of education generally is one of great difficulty; yet, strange to say, it is one upon which any body thinks himself qualified to construct a system, and establish rules, and dictate to a whole community; not aware, perhaps, that the wisest men have exercised themselves upon the same, with very doubtful success.

Milton wrote a treatise on education, and so did Locke. And it was in reference to them that Dr. Johnson said, 'Education in England has been in danger of being hurt by two of her greatest men.'

Strange things have been said in jest, or in earnest, concerning the studies necessary to form a physician. Sydenham advised Sir Richard Blackmore to read Don Quixotte. He probably spoke in jest. But it is impossible to read Sydenham and not perceive that his mind did in truth hardly admit any auxiliary to the exercise of its own observation. What he says of anatomy must startle the pains-taking pathologist of modern times, who bestows all his industry in tracing diseases home to the primitive structure in which they are engendered. Anatomy, he has told us, is only fit for a painter. Sydenham might have been *professionally* learned; but there is no evidence in his works that he was so. Perhaps he was offended with the kind of learning then in repute, which tended to make the practice of physic rest chiefly upon authority; or, perhaps, the very structure of his mind was such, that it was really incapable of gaining any thing second-hand which it could gather fresh from the reality; or perhaps he had a noble confidence in that wonderful faculty of observation with which he was endowed, and so resolved to use and to trust it to the uttermost, unaided and unencumbered by any foreign helps.

But Sydenham's education, in so far as it was not professional, was evidently of the best kind. His mind had been early acquainted with a strict, indeed with a scholastic discipline. His book is that of a scholar; I do not mean on account of the language in which it is written, but in its form and structure. Without any apparent artifice, the material facts, and delineations, and histories, arrange themselves all in the right places for being well understood; and they are all so skilfully reasoned upon as to lead you easily and naturally to the conclusions he desired.

Are we then justified, not by the advice of Sydenham, which was probably spoke in jest, but by his example, in concluding that nothing more is required, to fit a man for the safe and successful practice of physic, than a good *general* education, and an industrious use of his own observation in his intercourse with the sick? I think not; and, among many other reasons, especially for the two following:—First, Because you cannot tax the faculty of observation beyond its *common* powers and capacities, you cannot estimate it in the generality by what it was in Sydenham, and look to it for the same results. This would be the same thing as to take measure of all mankind by the proportions of a

giant, and make the single wonder of a hundred years the common expectation of every day.

Secondly, Supposing the faculty of observation existed in each of us at its utmost perfection, and enabled each to learn by it all that it is in its own nature capable of teaching; yet there are objects beyond its reach, the knowledge of which has, in the progress of our art, come to be considered as essential to the safe and successful practice of physic as those which lie strictly within its sphere; I mean the knowledge of morbid processes in all their variety, as they affect the structure and functions of our bodies. This knowledge has been derived from other methods of research, from anatomy, from chemistry, from experiment; and you can only gain it either by the use of such methods yourselves, or from the instruction of those who have used them. Sydenham himself could gain it in no other way.

But in our own day, there is little fear that students will be spoiled by the recommendation of their instructors to be content with a scanty knowledge, and trust to their own sagacity for the rest. They are not likely to suffer harm by having Sydenham held up as an example for imitation; the fear is of another kind (and it is well grounded), namely, that many men of the best abilities and good education will be deterred from prosecuting physic as a profession, in consequence of the necessity indiscriminately laid upon all for impossible attainments, of which no example is or can be held forth for their imitation.

After giving a sketch of the requirements insisted on by some persons before a student "can betake himself with effect to the observation of real disease, and hope to acquire a practical skill in treating it," Dr. Latham proceeds:

"Now I am persuaded that there does not exist at this day in the profession an individual who comes up to the standard which (it is implied) all ought to reach. It has been my happiness to know many men in my time who have had enough of attainment to command my highest respect; some who have reached great eminence during their lives, and some who have been thought worthy of monuments since their deaths; yet I have known one, and one only, who came up to the requirements of an introductory lecture which I have read; and that was Dr. Thomas Young. But Dr. Young stood alone among mankind. The most learned and scientific men of his time were struck with wonder at the extent and variety of his knowledge; yet Dr. Young was the only person whom any man now alive ever saw learned and scientific enough for a physician, according to the Utopian measure of things.

If all medical students had fifteen or twenty years at their disposal, and could dedicate them all to professional education, we might pardon a little innocent declamation in displaying the rich and varied field of knowledge about to be disclosed to them; but even then, sober truth would compel us to confess that the field so pompously displayed far exceeded in extent what the best minds could hope to compass, even in fifteen or twenty years. When, however, we recollect what space of time the majority of men so addressed really can give to their education, the whole affair becomes inexpressibly ludicrous.

Now I do protest, in the name of common sense, against all such proceeding as this. It is all very fine to insist that the eye cannot be understood without the knowledge of optics, nor the circulation without hydraulics, nor the bones and the muscles without mechanics; that metaphysics may have their use in leading us through the functions of the nervous system, and the mysterious connection of mind and matter. It is a truth; and it is a truth also that the whole circle of the sciences is required to comprehend a single particle of matter: but the most solemn truth of all is, *that the life of man is three score years and ten.*

How has it happened that while, in other countries, the medical profession has been exhibited under every imaginable form of ridicule, here, in England, it has been so seldom chosen as a fit thing to laugh at? The truth is, that here no idea of ridicule was ever popularly associated with it; and to have exhibited it as if there were, would have been out of nature and unsuccessful.

A vain, pompous, counterfeit form of knowledge without, and a downright stolid ignorance and incapacity within, made up a precious combination, which, not long ago, was found every where abroad. The mockery and fun that it excited were irresistible and inexhaustible; and Molière and Le Sage made the world ring with laughter at the expense of physic and physicians.

Depend upon it, what all men indiscriminately are told they *ought* to know, all men indiscriminately will soon *pretend* to know, be it never so extravagant; and when every medical man in every town and village throughout England, be he physician, surgeon, or apothecary, shall, in right of his profession, claim the homage due to vast learning and science, there will not be wanting some Molière or Le Sage to hold us all up to the just ridicule of mankind.

Let us take care then what we are about, and beware how we change the character of the English practitioner of physic. He is sound and unpretending, and full of good sense: what he wants is a little more careful, and a somewhat larger instruction

in what bears directly upon the practical part of his profession. Give it him (indeed we *are* giving it him), and he will become more trustworthy and more respected every day. But for all that is beyond this, we may recommend it, but we must not insist upon it; we must leave it for each man to pursue according to his leisure, his opportunities, and his capacity, and not exaggerate it into a matter of necessity for all. Where too much is exacted, too little will be learned; excess on the one hand naturally leads to defect on the other.

I know that much disquietude, if not unhappiness, has been felt by students, and especially by the best informed and best disposed, when, at the entrance of their profession, they have been met by obstacles which seem insurmountable. It is the special infirmity of ingenuous minds to reflect with too much anxiety upon their own knowledge; to sit in judgment upon themselves, calculating whether they have made the best of all their opportunities, and wishing, vainly wishing, that their time might come over again, to enable them to supply this omission, or rectify that mistake. By many such, who are at all times too ready to deal hardly with themselves, every exaggerated statement of what they are required to learn is severely felt.

A well-weighed scheme of professional education, sound and practicable, comprehensive yet moderate in its requirements, and adapted to all, besides the many good purposes it would serve, would have the special benefit of satisfying the minds of students themselves that at each step of their progress they are in the right path. Such a scheme we are not likely to have soon. I will not presume to suggest what it ought to be; I would rather endeavour to show you, that, in spite of what you are at present inclined to fear, you may hope to earn a good reputation, to deserve and gain the approbation of mankind as others have deserved and gained it, although you do not possess a perfect literary and philosophical education.

Turn away, then, from the contemplation of this ideal perfection, which can only make you despair, and look to some real examples for your encouragement. But take care that they be *high* examples, and such as no small or ignoble efforts can imitate."

The chapters on "The Doctrine of Symptoms," embrace auscultation and the various physical signs of disease, and ought to be studied by all who aspire to a knowledge of these subjects.

Half-Yearly Abstract of the Medical Sciences. By W. H. Ranking, M. D., etc. Assisted by Drs. Guy, Day, Ancell, and Kirkes. No. 5, *January to July*, 1847. Philadelphia, Lindsay and Blakiston.

We had hardly thought of looking for this number until we found it upon our table, so prompt have all those been who are concerned in bringing it out; to the American publishers, in particular, the greatest praise is due, for supplying it to us at so early a date after its appearance in Europe.

In looking over the present number, we have found the same careful selection of matter and admirable arrangement so conspicuous in its predecessors. The "*Reports*," which constitute an important feature of the work, are characterized by great ability and impartiality.

THE MEDICAL EXAMINER.

PHILADELPHIA, AUGUST, 1847.

NATIONAL MEDICAL CONVENTIONS.

We have received the official copy of the "Proceedings of the National Medical Conventions, held in New York, May, 1846, and in Philadelphia, May, 1847." An account of the Convention which assembled in New York was published in the Medical Examiner last year, and a considerable portion of the proceedings of that held in Philadelphia has likewise been laid before our readers, and the remainder will appear as we can afford space. In our Record department of the present number will be found the "Report" of the committee on "a uniform and elevated standard of requirements for the degree of M. D." The *report* is plainly written, and manifests throughout good temper and honorable purpose; but its reasonings, to our mind, are not always conclusive; not because of any lack of in-

ductive power on the part of its authors, but from the want of a proper attention to some of the facts which are involved in the questions discussed.

The Committee, it will be seen, institute a comparison between the requirements for medical honors in the United States and those demanded in the oldest countries and most absolute governments of Europe, where the precepts of the Colleges are enforced by the strong arm of the law, and where every licensed practitioner is protected in the exercise of his profession; and where, too, in the strongest instances cited, the educational expenses of the student are borne by the government.

"We are free to confess," say the Committee, "that within the last twenty or five and twenty years, medicine has been better taught among us than at any former period."

This is certainly true; and we are glad to have the testimony of the Committee to the fact, for it would seem to be the opinion of some enthusiasts on the subject of "reform in medicine," that every thing is growing worse, and that medical instruction, as well as every other thing medical, is absolutely approaching the lowest point of degradation.

We are probably correct when we say that a majority of the Convention which adopted the declaration we have cited, as well as several of the committee from whence it emanated, received *their* medical education under circumstances and at a time when, according to the *report*, medicine was not so well taught among us as at present; and yet we do not believe that any one of these respectable gentlemen thinks, or would have others to think, that *his* education was so defective as to disqualify him for the proper performance of the duties of a physician; and if not, with what justice can such a conclusion be predicated of those who now enjoy the *greater* advantages admitted by the report!

Again—"It is unquestioned," says the *report*, "that the facilities for education have been augmented, not only in the public schools of the country, but private enterprise has exerted no slight influence in the attainment of this end."

That "the facilities for education have been augmented," and, in the larger medical schools, at least, are every year "augmented," is a fact familiar to all who have enjoyed opportunities for observing. This, one would think, ought to satisfy well wishers of our profession that the present system—a system which, it is confessed, leads to regular improvement—should not be hastily or inconsiderately

changed. The "private enterprise" alluded to, we understand to mean, the numerous associations and individuals engaged in lecturing on the various branches of medicine and collateral subjects; and we are happy to agree with the report in the estimation of their utility. These private teachers are found in all our large cities where Medical Colleges exist, and, by occupying the summer months, in effect extend the term of instruction, which students may enjoy, to eight months or more in the year. Not only is "the term" extended in this way, but students have the opportunity of hearing the views of different teachers on the same subjects, and are thus led to compare and examine for themselves; and what is also important, the perpetual tread of these aspirants for professional honors upon the heels of those preceding them, prevents the possibility of the latter falling back, or even standing still. But fill up a large part of the year with college exercises, and this "private enterprise" to which the report accords, and justly accords, so much good, will be crowded out of existence—a result which certainly none but lazy and incompetent professors ought to desire.

We are glad to perceive that the *report* attaches much importance to the efforts of "private preceptors" in elevating the standard of our profession—a subject upon which we shall probably offer some remarks in a future number.

After an enumeration of the branches proposed to be taught in the schools—which are precisely those now taught in our principal colleges—the *report* argues: "With a lengthened period for teaching, a double advantage will be gained; a wider extent of information may be imparted to a student, while his time will be occupied with fewer lectures during the day." If "a wider extent of information" can be imparted in fewer lectures, most teachers will be glad to learn how; but if it require that *the number of lectures shall be increased* to attain this end, and fewer are to be given each day, then, according to our computation, it will require a very considerable extension of the term to accomplish the object. Among the resolutions passed by the late Convention, was one requiring that not less than *one hundred* lectures should be given on any one of the branches; but, on discovering that this would nearly *double* the number of lectures now given on certain of the branches, while the scheme of the Convention only contemplated *one-third* additional time, it was rescinded on the very next day—shewing that, however desirable the change, it was then deemed neither practicable nor expedient.

The first *resolution* reported by the committee, and adopted by the

Convention, recommends "to all the Colleges to extend the period employed in lecturing from four, to six months." Believing the proposition to be one of doubtful expediency, and that no conference among the Colleges in reference to the matter had occurred or was likely to occur, at least before their next sessions, we have felt some interest to know what course would be generally pursued on the subject. We have now before us the advertisements of most of them, from Maine to Louisiana, and from the Lakes to the Atlantic, and with a single exception, we have not discovered any change in their former course, that looks like conforming to this recommendation. In the excepted case, the only departure from the course hitherto pursued, as far as we are advised, consists in the annunciation that the lectures "will commence on Monday, October 18th," instead of the first Monday of November, and extend to the end instead of terminating at the middle of March. We have, we confess, been surprised at the almost unanimous concurrence in the action of the Colleges in this matter—the more remarkable because it is without concert or any conference whatever. That so many institutions, widely separated, placed under diverse circumstances and controlled by different councils, should arrive at the same conclusion, in opposition to the recommendation, and the *threat* contained in one of the resolutions, of the Convention, is indeed very remarkable, and shows clearly enough what those who have experience in the matter think on the subject,—that it is environed with greater difficulties than some have contemplated.

The tenth and last *resolution*—"That it be considered the duty of Preceptors, to advise their students to attend only such institutions as shall rigidly adhere to the recommendations" of the Convention, seems to be unheeded by them all. We do not know of a single Medical College in the United States that rigidly adheres to all of the recommendations, or proposes to do so.

The whole subject, in fact, of education, is one of very great difficulty,—particularly where masses are concerned, the individuals of which are so unequally circumstanced as are young men spread over an extensive country, with different habits, means, objects and indications, such as we find engaged in the pursuit of medicine as a profession. On another page we have copied some remarks on this subject, by Dr. Latham, which are deserving of attention both from the learning and eminence of their author and the sound common-sense views they express.

CATALOGUES OF MEDICAL COLLEGES.

We have received the catalogues and annual circulars of the following institutions, viz.:

University of Louisville.—The last Legislature of Kentucky granted a charter for a University, under which the late Medical Institute of Louisville has become the Medical, and the suspended Louisville College is to become the Academical Department; a Law Department being also added. Number of the medical class of the last session, 348.

Medical Institution of Geneva College.—Number of Graduates at the last commencement, 43.

Medical Department of Transylvania University.—Class 205; Graduates, 68.

Willoughby Medical College.—This institution has been removed to Columbus, Ohio; number of the last class, 90.

Baltimore College of Dental Surgery.—This institution continues its useful career as heretofore, under the same Faculty and scheme of instruction.

RECORD OF MEDICAL SCIENCE.

We received the following account of the proceedings of the Chester County Medical Society, from the Secretary, Dr. Worthington, in time for our last number, but by accident it was omitted. We shall be more careful of any favors we may receive from the worthy Secretary, or any of his fellow members, in future. Among the members of the Chester County Medical Society we discover the names of gentlemen who have long been eminent as practitioners, and some who have made important contributions to the literature of our profession, and we regard their re-association, aided and incited by the younger brethren to whom they have extended the right hand of fellowship, as fortunate for themselves and auspicious for science.

CHESTER COUNTY MEDICAL SOCIETY.

The Chester County Medical Society, which had suspended its operations for sixteen years, held a meeting on the 8th of June, 1847. Members present: Dr. Wm. Darlington, President; Doctors Isaac Thomas, John B. Brinton, C. W. Parish, Isaac Pennington, and Wilmer Worthington.

The following physicians were elected members and signed the constitution :--

Doctors J. R. Walker, S. H. Harry, C. R. Parke, John Edge, W. W. Reese, E. F. Rivinus, W. D. Hartman. R. H. Smith, N. H. Clarke, John Kinsey, S. Harris, J. T. Huddleson, and E. Harvey.

The Society appointed Drs. Worthington, Parish and Rivinus to revise the constitution, and report to next stated meeting.

The following are the officers for the present year :—

President.—Dr. William Darlington.

1*st Vice President.*—Samuel McCleane.

2*nd Vice President.*—Isaac Thomas.

Corresponding Secretary.—C. W. Parish.

Recording Secretary.—Wilmer Worthington.

Treasurer.—E. F. Rivinus.

Orator.—Wilmer Worthington.

Drs. Pennington, Thomas, Harry, Harris, Walker, Parish, and Huddleson, were appointed a committee to ascertain and report to next stated meeting, the names and residences of all the regularly educated physicians in Chester and Delaware counties.

Adjourned to meet at Westchester, on the first Wednesday of September next, at 2 o'clock, P. M.

WILMER WORTHINGTON.

Report of the Committee appointed under the fourth resolution of the National Medical Convention, which assembled in New York, in May, 1846.

Resolved, —That it is desirable that a uniform and elevated standard of requirements for the degree of M. D. should be adopted by all the Medical Schools in the United States; and that a committee of seven be appointed to report on this subject, at a meeting to be held in Philadelphia on the first Wednesday in May, 1847.

Committee—Drs. Haxall and Cullen, of Richmond; S. A. Patteson, Manchester, Va,; A. Flint, Buffalo, N. Y.; J. Perkins, Castleton, Vt.; J. A. Wing, Albany, N. Y.; Geo. W. Norris, Philadelphia.

The committee under the fourth resolution of the convention which assembled in New York in May, 1846, and which has for its object the adoption of a uniform and elevated standard of requirements for the degree of M. D., have had the same under consideration, and beg leave to offer the following

REPORT.

The excitement which appears to have pervaded the medical mind for some considerable time in relation to the subject of reform, not only in this but in foreign countries, would of itself present an argument sufficiently demonstrative of its importance.

The ceaseless and unwearied exertions of the master-minds of the profession, constantly urging on improvement in the various departments of medicine, have elaborated a work which it will require years of toilsome study justly to appreciate; and while we are far

from indulging the Utopian idea that the newly graduated student is to be immediately transformed into the accomplished physician, yet do we believe from the complaints which spring from almost every quarter, that lamentable deficiencies do exist, and that these deficiencies should be corrected.

Nor do we stand alone in this opinion. The same spirit of reform which has assembled this convention, produced in Great Britain amendments to the charters of her Colleges, and convoked the Medical Congress which sat in Paris, than which a more renowned body of men never met to deliberate upon the interests of the profession, Not a great deal, it is true, has yet been accomplished in Great Britain, owing to the influence still exercised by medical corporations, and the indifference with which Parliament has regarded the efforts of the reformers. But in enlightened France, protected and cherished as are all her literary institutions by government, the most propitious results have been obtained. The term of study has been prolonged; other branches of medical education have been added to the already extensive curriculum, and more frequent and rigid examinations have been adopted by which to test the qualifications of the candidate.

And when we consider the existing systems of other countries, how vast a difference is manifested upon the most cursory examination; truly must it be acknowledged that the mass of our medical graduates is inferior to those of other climes, or that the talent of America, like its broad and impetuous rivers, or its majestic forests, can recognize no equality in others.

We are free to confess that within the last twenty or five-and-twenty years, medicine has been better taught among us than at any former period. It is difficult to imagine, indeed, that the progressive efforts of foreign lands should pass wholly unnoticed in this; and, while their example has been productive of some improvement, much yet remains to be accomplished. It is unquestioned that the facilities for education have been augmented not only in the public schools of the country, but private enterprise has exerted no slight influence in the attainment of this end. But let us not remain stationary while the interests of society and the profession impel us to further advancement.

If we discard the preliminary education demanded of students in Europe, and confine our attention to the branches actually taught in the medical schools, it will be perceived that the deficiency on our part is sufficiently apparent. All the branches which we profess to teach are taught by them; in addition to which (and now we refer more particularly to continental institutions) we may enumerate the several subjects of Zoology, Botany, Comparative Anatomy, the History of Medicine, Hygiene, Medical Physics, and Clinical Medicine and Surgery. All these branches, it is true, are not crowded upon the mind during a single session, but are distributed throughout successive years; while clinical instruction, in both medicine and surgery, is reserved for the last year or two, after it is presumed the student has made such advances in his primary studies as will enable him per-

fectly to understand the lessons which are taught him at the bedside of the patient.

Instruction so full and so complete must, of necessity, require a lengthened period for its accomplishment; hence we find that, in France and Austria, the term of lectures is extended to a fraction more than four years; in Germany to three years and four months; in Great Britain to two years, while in the schools of our own country, two sessions of four months each are alone sufficient to entitle the candidate to an examination. And if we extend our inquiries a step further, we shall find as great a contrast in regard to the examinations by which the qualifications of candidates are tested. Nowhere, we believe, except in England and America, is the qualification made to rest upon a single viva-voce examination; but throughout the period of the student's probation, repeated examinations are held at stated intervals. By proceeding in this manner, not only is the qualification more accurately ascertained, but certain branches are completely mastered before others have been commenced. Thus we learn from Mr. Surgeon Wilde's work on Austria and her institutions, that, at Vienna, the student is compelled to undergo an examination at the end of every six months by each professor whose lectures he may have attended. During the fifth year, which completes his term of study, he is subjected to two other examinations, besides giving a detailed history of two or more clinical cases, and defending in public a thesis written in the Latin language. In Prussia, four examinations are required. When the pupil has satisfactorily completed the third, the honors of the Doctorate are conferred upon him; but he is not yet permitted to enter upon the practice of his profession. To enjoy this privilege, a more rigid ordeal must be passed; he is now called upon to demonstrate his *practical* acquaintance with the several subjects in which he has been instructed; to take charge of patients under the immediate inspection of his teachers, and finally to be questioned by eight of the most distinguished professors of the country in every department of medical science. By a recent decree of the University of France, it is now ordered that examinations shall be held at the termination of each year upon the branches which have been taught during the year; at the conclusion of the whole term of study, a final examination is instituted, embracing the subjects taught throughout the whole course. A knowledge of clinical medicine and surgery is also required, and a thesis must be publicly defended.

Although thus rapidly and most imperfectly enumerated, we have thought it not inappropriate to the subject to mention the requisitions which are demanded in foreign schools. They either exact of their pupils an unnecessary standard of requirements, or we, on the contrary, are satisfied with too low a grade of qualification. Which alternative is this convention prepared to adopt? Are we willing to assert, and maintain the opinion that he who has passed eight months within the walls of a medical college is as well fitted for the practical duties of his profession, as he who has devoted years to more extended studies? Assuredly we cannot advocate a proposition so absurd.

Nor, perhaps, is it at all requisite to occupy the time of the convention with a long detail of arguments in order to prove the *necessity* of some measures of reform.

In regard to the two subjects of preliminary education and the mode of examination, this committee has nothing to do. But being charged with the duty of reporting upon a uniform and elevated standard of requirements for the degree of M. D., whatever alteration in the present system it may recommend, will more immediately bear upon the interests of the schools. Yet let it not be supposed, as some we fear have imagined, that the object of this Committee, or of this convention, is to attack with a ruthless hand the institutions of the country, rendered venerable by time, or that still larger number whose charters have been obtained at a more recent date. We believe that no agrarian feeling has stimulated to action the advocates of reform in this or any other land: we dare express the conviction that the best interests of society and of the profession itself (which spring from no selfish considerations,) could alone have commenced a work, which, if calmly and perseveringly conducted, must redound to the good of all.

We are aware that many obstacles are opposed to the successful prosecution of the several matters upon which we have assembled to deliberate. With no National Legislature to regulate our Medical Institutions, and with a reckless indifference to their concerns too often practised by our State Governments, each has endeavoured to build up for itself, if not an enduring reputation, at least a long catalogue of names. And the colleges themselves, resting secure in their chartered rights, may contend against any interference with their several systems of education; although we would fain indulge the hope that some among them stand prepared to listen to that voice which rarely speaks in vain—the voice of public opinion. This it is which now agitates the professional mind from one end of this Union to the other; and this it is which, if not now heeded, will not cease to reiterate its cry. Let but a very few even of our conspicuous institutions demand of their pupils a more extended course of study, and so far from their interests perishing in the attempt, we cannot doubt that an accession to their numbers will ere long reward their efforts. The possession of the diploma no longer tests the qualification of the man; and it cannot be doubted that the large number of Medical Colleges throughout the country, and the facility with which the degree is obtained, have exerted a most pernicious influence. Numbers of young men have entered the profession who were not prepared for its onerous and responsible duties, who, after a longer or shorter period of disappointment, have served to swell the list of empirics, or to seek employment by means unbecoming the character of the physician or the gentleman. Nor can it well be otherwise, when each returning spring lets loose upon the community some twelve or thirteen hundred graduates, whose professional existence must depend upon the encouragement they receive.

To correct these evils it is indispensable that the standard both of

preliminary and of medical education should be elevated; and as we have said before, let no institution fear to commence the laudable undertaking. The encouraging plaudits of the profession will cheer it on, and its general voice will direct our medical students to that source of information from which is to be derived the largest supply. We are, moreover, unwilling to inflict such discredit upon the ingenuous youth of the land as to imagine, that they would not voluntarily become the pupils of that school whose diploma is to be gained by a more prolonged and complete course of study. They will feel that their success in after life will mainly depend upon the labours of their earlier years; and when success shall crown their efforts, they will enjoy the proud satisfaction of knowing that it is based, not upon the disgraceful trickery of the impostor, but upon the solid foundation of positive acquirement.

It may not, perhaps, be wandering too far from our legitimate course to remark, that no ordinary responsibility rests upon Professors themselves. They stand as the guardians, more than any others, of the public weal; for every student who receives the diploma, is furnished by them with *prima facie* evidence, that he is prepared for that important occupation in which he seeks to engage. And if we admit the supposition that in any case he is not thus prepared, it will require the prediction of no seer to foretell the lamentable result. We believe the opinion defensible, that in no profession is it more difficult to arrive at just conclusions, as to real merit, than in that of medicine. "And hence (in the language of another) there devolves upon those who are the most competent to judge, and who have the best opportunity for judging, a vast responsibility to see well to it that none but the truly meritorious should be admitted to the profession under their sanction. From the fact that society cannot in this respect adequately protect itself, the Teachers in our Medical Schools should exercise a guardianship the more watchful, a jealousy the more keen, and a firmness the more unyielding." With a determination thus expressed, to furnish the community with individuals who have gained the honours of the Doctorate solely on account of their merit, it cannot be saying too much when we assert that a reciprocal duty rests upon it; a duty which should ever lead to the protection and encouragement of those who have devoted their time and talents to its dearest interests.

The most beneficial consequences may also be expected from the efforts of private Preceptors. The position can scarcely be controverted, that a proper inquiry into the fitness of young men to become Students of Medicine is but seldom instituted; and numbers have been admitted into the offices of their Preceptors who were deficient even in the most common branches of an English education. Too long has it been imagined, and too often has it been asserted, that the veriest dolts possessed intellect sufficient for the study of medicine. To such the idea could never have occurred, that within its broad and expanded limits may be profitably included a knowledge

of almost every science ; nay, more, may we not truly say that a high and exalted position can never be attained, unless the mind be well stored with an amount of collateral information which will be found to bear upon our professional studies at every step ?

There is another point in which the preceptor sometimes fails to do his duty. We are too often satisfied with merely placing the most approved authors, if you please, in the hands of our pupils, without instituting a regular series of examinations and explanations, in default of which the impressions produced by reading are frequently evanescent, if not erroneous. The inexperienced mind of the student requires so to be regulated in its pursuits, that each successive link in the chain of information may be properly adjusted ; by which arrangement not only is much economy of time and labour secured, but the field of knowledge is thus gradually expanded before him, until finally he is brought to comprehend its whole area in all its uniformity and beauty. Let us then exercise a jealous watchfulness over our pupils in these particulars ; let us remand to academical teachings the individual who has neglected the rudiments of a common education, and let us feel that we have not rightfully earned our fees of tuition, unless we shall have honestly laboured to advance the student's interests by all the means in our power.

In entering upon the principal purport of this report, it is deemed advisable to remark, that in order to obtain a knowledge of the requirements demanded by the various schools of the country, a letter was addressed to all whose existence was known to your committee, requesting them to furnish the desired information. These consisted of thirty-three in number ; and answers were received from nineteen, being a fraction more than one-half. In the majority of instances pamphlets were forwarded to the chairman, containing the rules and regulations of the college, together with the branches taught ; while from others, letters were received simply stating that two full courses of lectures were demanded, that the candidate must be twenty-one years of age, of good moral character, &c. From this correspon dence but little available information was derived. A circular was then dispatched to the different colleges propounding the following questions, answers to which were respectfully solicited. Nineteen of these circulars were filled up and returned.

State 1*st*. The number of students during the session of 1845–6.
2d. The number of graduates in 1845–6.
3*d*. The number of charity pupils in 1845–6.
4*th*. The number of professors attached to your school.
5*th*. The date at which lectures begin and end.
6*th*. The requirements for a degree.
7*th*. Is the inquiry made previous to examination, whether or not these requirements are fulfilled ?
8*th*. Is any evidence of having attended a course of clinical instruction necessary to graduation ?

9th. Is it required of candidates for graduation that they shall have devoted any time to dissection?

The responses to these several questions have been arranged in tabular form, from which the result of the whole correspondence may be ascertained at a glance, and which your committee beg leave to lay before this Convention, as a part of this report. We cannot avoid the expression of our regret, that so many of the colleges have failed to respond to our circular, not, we hope, from a listless indifference to the subject, or a determination not to abide by the recommendations of this body. Information was also requested from the proper authorities in regard to the requirements of surgeons in the army and navy of the United States; but no reply has been received from them. (See Note A.)

In summing up the information obtained from the nineteen colleges named in the table, in the order in which the questions were proposed, it will be found that the number of students belonging to these institutions during the session of 1845–6, amounted to 2544, including 31 non-paying pupils; and that the number of graduates was 730;—the number of professors varies from *three* to *eight*. It may be proper to remark that the lowest number here named is attached to the University of Virginia, where the usual branches of medical education are taught, and where the term of study extends throughout the period of *nine* months. If we exclude this institution from our table, the minimum is *five* and the maximum is *eight*. The time employed in lecturing also varies; *thirteen* weeks being the shortest, and *eighteen* the longest period. *Sixteen* weeks, however, are devoted to the lectures, in a large majority of the schools. The requirements for the degree of M. D. appear to be very general;—the candidate must be twenty-one years of age;—his moral character good;—his examination satisfactory;—his thesis passable, and he must have attended two full courses of lectures, to be included within the period of three years' study. In some of the schools a practice of four years and an attendance on one course of lectures, is sufficient to entitle the individual to an examination. Branches are taught in some institutions which are omitted in others, and the manner in which these are distributed is by no means uniform. It appears without exception that the inquiry is made previous to examination, whether or not all the requirements have been fulfilled, and in some cases unquestionable proof of the fact must be adduced. Evidence of having attended a course of clinical instruction is required in *twelve* of the colleges, while in *seven* it is not; and as to dissection, *five* render it obligatory, and the remaining *fourteen* are content to urge its recommendation.

Such, then, is the information which the committee, after diligent inquiry, is enabled to lay before this body. It would have been a matter of some importance to have received answers from all the schools, for in that case an account entirely accurate of the whole number of students in the United States would have been obtained. (See Note B.)

It will be seen that the nineteen colleges which noticed our circular, report the aggregate number to be 2544; and if it be proper to assign the same ratio to the fourteen which did not, the whole number of students during the session of 1845–6, will be found to be 4418 and a fraction. We believe this to be a very fair statement, for several statistical tables published from time to time in the journals, have varied but little from this amount; and if we extend the same rule to the classes of graduates, we reach the conclusion that a fraction less than 1300 were added to the already existing number of physicians, in the spring of 1846.

The very large number of physicians in the United States, a number far larger in proportion to its population than in any other country perhaps of which we have a correct knowledge, has frequently been the subject of remark. To relieve the diseases of something more than twenty millions of people, we have an army of Doctors amounting by a recent computation to forty thousand, which allows one to about every five hundred inhabitants. And if we add to the 40,000 the long list of irregular practitioners who swarm like locusts in every part of the country, the proportion of patients will be still further reduced. No wonder, then, that the profession of medicine has measurably ceased to occupy the elevated position which once it did; no wonder that the merest pittance in the way of remuneration is scantily doled out even to the most industrious in our ranks,—and no wonder that the intention, at one time correct and honest, will occasionally succumb to the cravings of a hard necessity. The evil must be corrected. With a government like ours, to diminish the number of medical schools is not to be expected; and the corrective can alone be found in the adoption of such a standard of requirement, in the general estimate of which the recommendations of this committee will form but an item, as will place, the diploma beyond the reach of those who seek to wear its honours without deserving them.

The shortness of the time allotted to the delivery of Lectures, we believe to be an evil of no small magnitude. It is next to an impossibility, that the strongest intellect can receive and well digest some half a dozen discourses or more a day, embracing subjects which have oftentimes little or no immediate connection with each other. The mind becomes wearied with the multiplicity of its occupations, and the thoughts of to-day are forgotten in the constantly recurring and harassing duties of the morrow. A proper allotment of time cannot be given to that deep reflection which the importance of the subject demands, and without which no solid advancement can be made. There are individuals, too, who do not always rest satisfied with professorial prelections, who approve in its fullest extent the adage, "nullius addictus jurare in verba magistri," and who seek in the recorded experience of others the widest extent of information. Nor can Teachers themselves, with every disposition to impart the fullest instruction, do justice to their several branches within the limited period of four months. For this reason, the examination

which may, indeed, test the actual acquirement of the student, can never embrace an extensive field of knowledge. Under the present regulation this cannot be expected; for justice to the pupil must prevent an inquiry into subjects in which he has never been instructed.

In regard to the branches to be taught, it is not improbable that the recommendation of the Committee may not meet the views of some of the members of this Convention. It may be thought that others should have been added, and that consequently the number of Professors should have been considerably augmented. This subject was freely canvassed by the Committee, and the opinion was general that in the commencement of our effort to reform the existing condition of things, too high a standard of requirement ought not to be immediately insisted on. The conclusions to which this Convention may come upon any subject, cannot be forced upon the schools contrary to their wishes. In the advice of this body there exists, however, a moral power which it would be unwise to disregard, a power which, while it seeks to elevate medical requirement, should not impose a single requisition which is not entirely practicable. Besides, it is to be recollected that the decrees of this Convention need not be final and unalterable. The National Medical Association, contemplated under the first two resolutions adopted at the meeting in May last, which it is to be hoped will convene from time to time in different parts of the country, can legitimately exercise the same influence which we now seek to do; and when in after time it may be deemed advisable to add new subjects of instruction, it will not hesitate to express its opinion. Under this view of the matter, your Committee advise that lectures be given on the following branches, in all the Colleges: viz., on the Theory and Practice of Medicine; the Principles and Practice of Surgery; General and Special Anatomy; Physiology and Pathology; Materia Medica; Therapeutics and Pharmacy; Midwifery, and Diseases of Women and Children; Chemistry and Medical Jurisprudence.

These subjects, it is true, are now taught in the majority of our schools. With a lengthened period for teaching, a double advantage will be gained; a wider extent of information may be imparted to the student, while his time will be occupied with fewer lectures during the day. As to the appropriation of the several branches, it is deemed inexpedient to make any suggestion, as the circumstances of each Institution may be such as will necessarily lead to a different arrangement in this particular.—It is believed, however, that a slight augmentation in the number of Professors will become necessary.

In regard to clinical instruction, your Committee would willingly have made it a requisition to the attainment of the diploma; but an insuperable difficulty seemed to exist. It is believed that few of the Colleges have Hospitals attached to them, and in very many instances where such Institutions exist in the Cities, the Professors do not receive the appointment of attending Physicians and Surgeons. Con-

sequently, the opportunity is lost to them of imparting such instruction as would be valuable to the student.

We cannot, however, close this portion of our report, without urging the very great importance of clinical instruction. Many a young man has entered upon the duties of his profession, sufficiently instructed, it may be, in its principles, who has most painfully felt the responsibility of his position. In default of a certain degree of practical knowledge, indecision must often fetter his efforts to the detriment of his patient, and that self-confidence, which can alone restore serenity to his mind, must be purchased by a long period of perplexing doubt. During the pupilage of the student, he should lose no opportunity of witnessing cases of disease wherever they are to be found. Instructors themselves, should esteem it their highest duty to introduce their pupils to the bedside of their patients in all cases where propriety will admit of it. The Hospitals, Penitentiaries, and Poor-houses, found in so many of our towns and cities, will furnish from time to time, cases of every description, while the pauper practice of the country will prove no indifferent means of imparting clinical information. Instruction gained from these sources in free and familiar conversation with the Preceptor, will perhaps be of more avail than any other; for the large number of students who occasionally throng the Wards of the Hospital, render it impossible for each one to obtain a correct knowledge of the cases presented to him. We do not intend by this remark to convey the idea that information given in this way would be valueless. On the contrary, when properly conducted, it may be made productive of the greatest good. Let the Professor daily analyze the symptoms which arise in every case: have them carefully noted down in his ward-book, together with his prescriptions, and at its termination let him review the whole ground, aided by a post-mortem examination if it result unfavourably, and he will impart instruction which is truly valuable.

By reference to the table accompanying this report, it will be seen that only five of the colleges insist upon dissection as a requisite to graduation. Your committee accord in the opinion, that all should render it obligatory upon the student to devote some portion of his time to this needful pursuit. To enter into an argument to prove its absolute necessity not only to the surgeon but also to the physician, would be a work of supererogation. We therefore offer without further remark, the following resolutions for the adoption of this Convention:

Resolved, 1st. That it be recommended to all the colleges to extend the period employed in lecturing, from four, to six months.

2d. That no student shall become a candidate for the degree of M. D., unless he shall have devoted three entire years to the study of medicine, including the time allotted to attendance upon the lectures.

3d. That the candidate shall have attended two full courses of lectures, that he shall be twenty-one years of age, and in all cases

shall produce the certificate of his preceptor, to prove when he commenced his studies.

4th. That the certificate of no preceptor shall be received who is avowedly and notoriously an irregular practitioner, whether he shall possess the degree of M. D. or not.

5th. That the several branches of medical education already named in the body of this report, be taught in all the colleges; and that the number of Professors be increased to seven.

6th. That it be required of candidates that they shall have *steadily* devoted three months to dissections.

7th. That it is incumbent upon Preceptors to avail themselves of every opportunity to impart clinical instruction to their pupils; and upon Medical Colleges to require candidates for graduation to show that they have attended upon Hospital practice for one Session, whenever it can be accomplished, for the advancement of the same end.

8th. That it be suggested to the Faculties of the various Medical Institutions of the country to adopt some efficient means for ascertaining that their students are actually in attendance upon their lectures.

9th. That it is incumbent upon all schools and colleges granting Diplomas, fully to carry out the above requisitions.

10th. That it be considered the duty of Preceptors, to advise their students to attend only such institutions as shall rigidly adhere to the recommendations herein contained.

All which is most respectfully submitted.

May, 1847. Ro. W. Haxall, *Chairman.*

Note A.—After finishing this report, a communication was received from H. L. Heiskill, acting surgeon-general, in answer to the letter addressed to the surgeon-general late in May, 1846.

The absence of this officer from the seat of government prevented an earlier reply. Such portions of said communication as have reference to the subject matter of this report, your committee have thought proper to embody in this note. Many of the duties required of army surgeons are of course not performed by practitioners in civil life.

"Under the regulations the medical officer is required to investigate the physical agents that may affect the health of the troops, to make reports upon the medical topography of his station, to aid in the selection of military positions, and, as a question of military hygiene, to express his views in respect to the diet, clothing, watering and exercises of the troops. He is from the necessity of the case a *general practitioner* in the most extended sense of the term, and from location he is often thrown entirely upon his own resources, and deprived of the advantage of calling to his aid the friendly counsel of professional brethren."

"Nor have the army medical officers been regardless of the high claims of medicine in itself as one of the *liberal* professions. Themselves medical men, they feel a deep interest in the character of the

profession, and rejoice in any measure that would tend to promote its honour and efficiency."

Next follows a table showing the number of applicants examined from the year 1841 to 1845, both inclusive, being a period of five years. It here appears that 51 were examined, while only 17 were approved.

"The most striking cause of failure on the part of the candidates are, *insufficient preparatory education; a hurried course of professional pupilage; want of proficiency in practical anatomy*, in *pathology*, and in *clinical medicine*."

"The candidates are examined on the branches usually taught in our medical schools, also on their literary and scientific attainments, embracing a grammatical knowledge of the English language, Latin, and natural philosophy (or physics,) which are deemed important branches of education to those entering on the study of a *liberal* profession. Each candidate is required, as introductory to his examination, to prepare in writing a brief extemporaneous description of the causes, symptoms, pathology, treatment, &c., of such diseases as may be assigned by the Board, together with one or more prescriptions proper in the case, written out in form for the apothecary."

A merit roll accompanies the communication, which shows the branches upon which the applicants are examined. These are as follows: "Literary and Scientific qualifications, Anatomy and Physiology, Principles and Practice of Surgery, Principles and Practice of Medicine, Obstetrics, Materia Medica, Chemistry and Medical Jurisprudence."

"In the several branches herein enumerated, the candidate is required to be well grounded. The examinations are conducted with the view of ascertaining the measure of his natural endowments, his general professional intelligence, as well as his exact knowledge, his practical ability and strength of judgment."

Note B.—The Chairman received the reply of the Indiana Medical College, located at Laporte, on the Thursday before leaving home;—too late to be inserted in the table which had then been completed. In 1845–6, it had 81 students, 18 graduates and 6 Professors.

TABLE.

Names of Medical Colleges.	Number of students in the Session of 1845–6.	Number of graduates at close of session of 1845–6.	Number of charity pupils in 1845–6.	Number of professors attached to the college.	Date at which the lectures begin and end.	The requirements for the degree of M. D.	Is inquiry made before examination if they are fulfilled?	Is clinical instruction necessary to graduation?	Is dissection required as indispensable to graduation?
Medical College of Georgia.	112	30	0	7	2d Monday in November. Last day of February.	2 full courses of lectures. Usual private reading. Thesis. Good character.	Yes	No	Yes
Medical School of Me. Brunswick, Vermont.	70	19	0	5	Middle of Feb., and continue 13 weeks.	3 years study. 2 courses of lectures. Good character.	Yes,and enforced	No	No
Medical Department of the University of St. Louis.	53	11	0	7	1st Monday in Nov, end 1st day of March.	3 years study. 2 courses of lectures. 21 years old. Thesis.	Yes	Yes	No
Dartmouth College, Hanover, N. H.	85	31	0	6	Aug. 13., Nov. 21, 16 weeks.	2 courses of lectures. 3 full years study. Thesis.	Written evidence to be placedon file	No	No
Willoughby Medical College.	164	32	0	8	1st Wednesday in Nov., continue 16 weeks	3 years study. 2 courses of lectures. 21 years old. Thesis.	Yes	No	No
Medical College of Ohio, Cincinnati.	195	46	3	6	1st Monday in Nov. Last day of February.	21 years. 3 years study. 2 courses.	Certificate required to prove it	No	No
University of Pennsylvania.	414	171	6	7	1st Monday in Nov. About middle of March.	21 years. 3 years study. 2 courses of lectures. Thesis, &c.	Tickets are always examined	Yes	No
Franklin Medical College, Philadelphia.	35			7	2d Monday in Oct. Last day of February.	3 years study. 2 courses. 21 years, &c.	Yes	Always	No
Medical Department of University of Missouri.	85	9	0	6	1st Nov. 1st March.	2 y'rs. study and 2, or 3 courses, or 1 course with 3 years practice.	Yes	Yes	Yes

Medical Department of University of Louisville.	345	73	0	7	1st Monday in Nov. Last day of February.	2 courses, 21 years; or 1 course and 4 years practice.	Yes	Yes	Yes
Geneva Medical College, New York.	178	45	four state pupils	6	1st Monday in Oct. Last Tuesday in Jan.	21 years. 2 courses. Thesis.	Written evidence or sworn to	No	No
Massachusetts Medical College.	159	47	0	6	1st Wednesday in Nov. 1st Wednesday in March	21 years. 2 courses. 3 years.	Yes	Yes	No
Albany Medical College, New York.	113	46	four by law	8	1st Tuesday in Oct. 16 weeks.	21 years. 3 years study. 2 courses. Thesis.	Certificates are required	No	No
Western Reserve College, Cleveland, Ohio.	160	53	0	7	1st Monday in Nov. 16 weeks.	3 y'rs. study. Thesis. 2 courses, or 4 years practice and 1 course.	Yes	No	No
University of Virginia.	55	13		3	Continue 9 months.				
Medical Institution of Yale College, N. Haven.	53	19	8	6	Information is imperfect.	Bachelors of arts, 2 y'rs. study, all others 3 y'rs. 2 courses. 21 y'rs. &c	Certificates are required	No	No
College of Physicians and Surgeons, N. Y. City.	218	48	4	6	1st of November. Last day of February.	21 years. 3 years study. 2 courses. First examination before faculty, second before trustees, third before public on Thesis.	Certificates are required	No	No
Med. Department of Hampden Sydney College, Richmond, Va.	74	18	0	6	1st of November. 1st of March.	2 courses of lectures. 21 years. Thesis, &c.	Yes	No	Yes, one course
Washington University of Baltimore.	45	19	2	7	1st of November. 1st of March.	2 courses of lectures. Thesis, &c.	Yes	No	Yes
Total . . .	2513	730 Graduates	31 non-paying students (charity)						
Non-paying students, or charity students . .	31								
	2544								

Cases of Organic Diseases of the Womb and its Appendages. By Walter Channing, M. D.—Chronic organic affections of the womb and of its appendages have long been the reproach of medicine. They, many of them, tend to death, are malignant, and, having a bad name, little more is done for them than to make them as tolerable to the sufferer as well may be. Dr. Wm. Hunter, in a manuscript lecture of his on cancer of the womb, in my possession, makes many sensible remarks on the best mode of retarding those processes which always end in death. Thus he advises abstinence from animal food, except fish now and then, and of these recommends such only as are of white flesh, and have the least flavor—are the least stimulating, in other words. He is particular in his rules about dress, and especially directs that women with functional or organic disease of the womb or its appendages, and those, too, who would escape these, should wear flannel drawers. Rest, also, is among his prescriptions, and sarsaparilla his principal medicine. But Dr. H. says nothing about cure. His means have in view only to retard the advance of destructive processes, as ulceration in cancer, and so to prolong life. He does not look to cure, as among the purposes of treatment in such diseases. He would mainly labour to make a life of daily suffering more tolerable than without his agency it might be.

Osiander, of Gottingen, labored to cure, to remove radically, malignant diseases of the womb. He cut away diseased portions, and with a bravery which was always tempered with wisdom, and guided by the best knowledge of what he meant to do, and how it should be best done. He was often successful. McDowell, a physician in our western wilds, determined to do something to prevent the fatal issue of diseased ovaries, and in pursuing this purpose extirpated them, with a success, and in numbers, and under circumstances, which made an epoch in that department of surgery. Dupuytren and others followed Osiander in excising the mouth, the neck, or larger portions of the womb, but they were not very successful. Lizars, and quite lately Gray, have followed McDowell in his operations, but with less success.

Occasionally a case is referred to, of removal, either spontaneously, or by, or after the employment of medicine, of these diseases. I have thus known a cauliflower excrescence removed by ligature, without return of the disease. I have known very striking effects follow the internal and external use of medicine for tumors which for the most part are regarded as incurable, and which are passed by without exciting any remedial regard. Sir Astley Cooper somewhere speaks of the professional negligence of these diseases. Is it right to abandon their subjects, simply because such diseases have got a bad name? I have always treated them as I would other diseases. My attendance on them has been regular, and means have been put into use. The attendance has ceased, because at length it has appeared obvious that no benefit was coming of treatment, or the patient, or more frequently her friends, have thought farther care, or farther expense, unnecessary.

I will, in more or less detail, refer to some cases of reputed malignant diseases of the womb, and of its appendages, which have come under my notice, and for which means have been used, with a view to curative agencies.

Cases of Cauliflower Excrescence.

Case. I.—Mrs. ———. Tumor small, insensible, springing from the os uteri. Drain of *watery fluid* from vagina constant and great; occasionally hemorrhage; much exhaustion, and evident sinking from disease. A ligature was applied round the tumor. It came away, bringing a few shreds only of what it had surrounded. Discharge ceased. Upon examination no tumor was to be discovered. The os uteri from whence it sprang, was found healthy. Strength returned, and the patient after a time left the city without complaint. I have not heard of her since.

Case II.—Mrs. M———. The history of this case is very much the same with that above given. There was an insensible tumor springing from the os uteri, irregular in its outline, or rough from small projections. *Watery drain* constant from vagina—at times hemorrhage. Ligature was applied, and in a few days came away, bringing scarcely anything with it. The noose had sticking to it some very small remnants of the large tumor which it had surrounded. This woman recovered perfectly.

Case III.—Mrs. ———. This woman had a tumor like those above described, and with like symptoms. She died exhausted by discharge of water and hemorrhage. I saw her after death. Scarcely any appearance of tumor was discovered. In this case ligature was not applied.

Case IV.—Mrs. K———. I was desired in December, 1846, to visit Mrs. K. I found her in bed, thin, pale and sallow, and apparently suffering from some chronic and exhausting disease. She said she was over 40 years old, had been married ten years, and had never had children. Her complaint, she continued, was a tumor of the womb, which was of more than a year's notice by her. At times much hemorrhage occurred from it, and at all times a *watery* discharge. Of late this had become so great as to exhaust her exceedingly, and she thought that it would be impossible for her to survive many weeks if it continued. It was sufficient to wet forty large towels a week, sometimes eight in a day. It was water, without colour, without smell, and without mucus. The disease was in no sense, or in itself, a painful one. It pressed against the sacrum and produced pain in that bone, and it obstructed much the rectum, and so troubled its functions. She added, that within a short time emaciation had rapidly increased, and her strength had failed. She wanted to live. She would endure anything that she might live. I have heard the desire to live expressed by many, and when death was near at hand by cause of sudden diseases, or accidental occurrences, without precursory disease; but I never heard it utter itself with such emphasis as it spoke from that woman. She had a face which expressed in the strongest manner her whole feelings, and

having passed her hand over it as if to remove from it whatever might diminish the power of what she had to say, bent her eyes upon me as I leaned over the foot-board of her bedstead, and said, "Have you the heart, Sir, to do an operation which may save life, though it be at the risk of taking it? That is the question which I want answered, and in the most distinct manner." I said that I believed I was equal to my whole professional obligation, and would state to her what might be my duty specially to her, after I had learned by an examination what was her disease, and that I would act as that duty seemed to me to demand. She said that her case had already been examined, but no operation recommended, but she could not yet give up. She begged me at once to make the examination which was to settle the course I was to pursue.

Upon examination I found a tumor filling the vagina, and which was most developed in its sacral aspect. It was hard and perfectly insensible. It was not regular in its outline, but had projections, and superficial, and deep sulci between its rounded and ridge-like inequalities. It was of a greyish colour, and the discharge from it was an inodorous, colourless water. I said I saw nothing in the character of the tumor to forbid an operation. I described to her the operation, the ligature, and stated that it would give her little or no pain. I learned that a professional friend of great surgical knowledge and reputation had been asked to see her, but had not called, and said that I would request him to see her, as I wished to have his opinion of the operation I had in view. He called the next day, and wrote me that he thought the tumor presented no objections to the ligature, that an operation in the case might be done, but that inflammation might follow, and the tumor might re-appear. This opinion was stated to Mrs. K. She determined to submit to the operation, and to abide the issue.

A ligature was passed round the tumor, in the close of December, and it was purposely applied as high as it could be done. It was not found so easy to do this as was supposed, and as those who never made the attempt may imagine. The tumor filled the vagina. It was exceedingly irregular in its outline. The double canulæ of Gooch was used, and easily carried along the fingers, to the root of the tumor. The attempt now to separate the two, by keeping one fixed, and sweeping the other horizontally round the tumor, was embarrassed by many obstacles. It was at length done, and the silver clasps carried along the tubes to make them again one instrument. The ligature was now drawn tight and secured. Some pain followed this part of the operation, but soon subsided. It resembled the dragging sensation which I have heard complained of in other cases. The next day I found the instrument very far out of the vagina, and upon examination discovered that the ligature did not embrace the whole of the tumor, but had been carried by the canula into one of the deep depressions of the tumor, instead of encircling the base. I state this thus particularly, as a caution in applying the ligature round uterine tumors, especially malignant ones, which are much more apt to be

irregular in their outline than are the non-malignant. Said a physician who very kindly assisted me in this operation, let those who are astonished at a failure in doing such an operation try to do it themselves, and they may learn that there are difficulties in the way they hardly dreamed of. The ligature was now removed, and then applied again, and with entire success. It was tightened every two or three days, and each time showed that there was a gain on the tumor. Some days the ligature could be drawn an inch before it stopped. Generally not so much. There was always pain on drawing the ligature. It, however, was never a permanent pain, or of any long continuance. An opiate was often given to remove it, and doubtless made the time of suffering shorter. The instrument began at length to project farther and farther from the vagina. The ligature showed by its length that very little of the tumor remained encircled by it. I now examined the vagina, and found it empty. I could feel nothing but the canula, and a small loop of ligature encircling a portion of the original tumor which had not disappeared. The os uteri, excepting this spot which looked to the sacrum, was perfectly smooth and even in its outline, not a shred of tumor remaining except at the point referred to, and this was firmly within the grasp of the ligature. There was no discharge from the vagina. There had been scarcely any since the ligature was applied. What discharge did take place was the liquified tumor as it was cast off by the living textures from which it had been separated by living agencies. Nothing like a tumor had been thrown off. The ligature was now daily tightened, and I daily looked for its coming away. On the twenty-second day from the use of the canula, I found Mrs. K. in unusual spirits, and hiding something under the bed-clothes as I entered. I asked what it was. She at once drew out the instrument, which she said had come away that morning, and which she was now rubbing very carefully to restore to it its original brightness. I asked if anything had come away with the ligature. She replied, yes, and showed me a thin small mass, like dense membrane, on a towel. Upon examination I found that portion of the tumor remaining, round which I felt the ligature, of the size say, of one joint of the thumb, projecting from the posterior lip of the os uteri. I asked how it happened that the instrument had come off before separating the tumor. She said that she felt a strong desire to rise from bed to evacuate the bowels, and that, in suddenly moving, the instrument had been caught in the bed-clothes and was torn away from the vagina, giving her exquisite pain. I made no attempt to re-apply the ligature, for such was the stiuation of the remaining portion of the original disease that I did not believe that a ligature would hold on it.

Mrs. K. now rose from bed. Took exercise. Got excellent appetite. Gained flesh, and felt well. Not the smallest drain occurred from the vagina of water, of pus, or of blood. Her feet and ankles swelled, but at length this swelling disappeared. But after some weeks signs showed that the disease had returned. There was again water, and blood, and pain. She began to fail, and in five months

after the operation she died. To the last she never regretted the operation. It had lengthened life and enabled her to enjoy it. Cheerfully would she submit again to the same measure, if it promised her the least chance of continued existence. I could offer her no inducements to submit to it. Her power of living was well nigh gone, and she sunk and died.

Cases of Uterine Polypi removed by Ligature.

Case V.—Miss. S., aged 18. Came under my charge last summer. She was perfectly anæmic. I have seen many instances of this disease, but in no one do I remember its physiognomy to have been more strongly marked. The lips, gums, tongue, inside of cheeks, carunculæ lachrymales, nostrils, every texture was blanched. She had suffered from uterine hemorrhage for about four years. She had grown tall in that time, the time of growing, and was not emaciated. Other signs were palpitation on exertion or mental emotion, with dyspnœa, a sharp, quick, and frequent pulse, pink-colored veins, ringing or rather buzzing in the ears, and a throbbing of the cerebral arteries, compared to the sound of the discharging pipe of a steam engine. Stomach at times irritable. Great feeling of lassitude, and of exhaustion. The catamenial periods were attended by excessive flow, and in the intervals hemorrhage was frequent. She had been recently examined, and a tumor projecting out of the os uteri diagnosed. Upon examination I found the tumor to be very hard, insensible and small, of the size of a sma l pullet egg. Hemorrhage attended, and followed the examination. I could not reach the pedicle, if the tumor had one. I was disposed to consider it as springing from the cervix with a broad base. The ligature was applied. I tried different canulæ in this case, and though the tumor was not large, I found the largest instrument to answer best.

Pain was produced by tightening the ligature. As soon as pain occurred, the ligature was fastened where it was. Some soreness of the abdomen was complained of next day, and the instrument was not touched. The next day it was tightened, and pain again produced. Soreness of abdomen again occurred. I was satisfied that the tumor was insensible, but the neck being very short, if any existed, the strain of the whipcord was upon the womb, at the spot whence the polypus sprung. This explains the pain and the abdominal tenderness. In about a week the tumor and instrument came away. The polypus was perfectly white. I scarce recollect so white an animal texture. From this time hemorrhage ceased. The catamenia became regular, and the patient is now perfectly well. The tumor was accidentally lost.

Case VI.—Mrs. W., aged about forty ; has children. Has suffered greatly of late from uterine hemorrhage, and the exhaustion induced. Of late she has been obliged to keep still, and in bed, as in this way only can she prevent flooding. She suffers many of the symptoms given in Miss S.'s case, but not in so severe a degree. Within a few weeks her case has become alarming, and her physician, upon examination per vaginam, discovered a tumor projecting from the os-

uteri I was desired to see Mrs. W., and upon examination detected a tumor, in, but hardly projecting from, the os uteri. It was hard and insensible. It was closely embraced by the os uteri, so close that I could only pass a probe between them. It seemed very much as the glans penis looks in a severe case of phymosis. The woman was bleeding badly every day, but it was not possible to operate. It was advised to give her ergot in ten-grain doses, as often as five or six times daily, if her stomach would bear it. This was done, and pains in region of womb produced, and after a few days I found the tumor so much out of the womb as to allow the use of the ligature. It was applied. Hemorrhage at once ceased. Pain in the womb and abdomen was produced by tightening the cord, as in Miss S.'s case. But no untoward complication ensued, and in four days the tumor came away; since which, Mrs. W. has done perfectly well. The tumor was very firm and of a deep red color.

Cases of Ovarian Tumor.

Case VII.—Mrs. ———; married, has children. I saw this patient with Dr. Hanaford, A tumor, filling most of the lower part of the abdomen, presented itself. It was unequal in its outline, as if composed of many tumors. It was felt in the vagina, and so far filling it as to press the neck of the womb firmly against the symphysis, giving much trouble in passing urine. The uterine periodical function continued. Much suffering attended this disease. At times acute inflammatory attacks. The health had sunk, emaciation had occurred, the situation of the patient seemed hopeless. In its treatment constant efforts were made to sustain the patient while means were used to keep inflammatory processes in check, and to prevent increase of the tumor. Leeches, vesication, iodine ointment, hydriodate internally, sol. muriate of lime, &c., were among the means employed. At length a new symptom showed itself, which was the precursor of recovery. An involuntary and copious liquid discharge took place from the rectum. Some of it was collected in a vessel and examined. It was a perfectly transparent, dense, gelatinous liquid, very adhesive, and having a distinct albuminous odor. There was not the least trace of fecal smell in it at any time. The discharge went on. The tumor grew less. The pains which Mrs. ——— had so long suffered, ceased. She regained appetite, strength, flesh, and is now well. Is not this case of some interest in this regard, that it shows how a disease of the ovary, consisting of a fluid deposit, and threatening life, may disappear, and recovery happen, where opportunity is offered for a constant discharge of the fluid as it forms. The sac or sacs thus have an opportunity to contract. New processes occur in them from exposure to the air, and at length the sac disappears. What is done by a rude surgery, the pulling away, or cutting away the sac, or removal of the tumor by excision, is done by a gentler and wiser hand, and recovery follows. May not the ovary be punctured through the rectum, or vagina, and the natural surgery be thus in some sort imitated?

Case VIII.—E. L., about 30, unmarried. Has a large tumor oc

cupying one side of the abdomen, extending from the right iliac region beyond the median line towards the left, and above the umbilicus. Tumor apparently solid. I say apparently, for it is not easy to diagnose the liquid contents of such tumors, if liquids be in them, especially if the walls be thick, and the cavity within be formed of two or more non-communicating sacs. Examination per vaginam discovered a solid tumor filling most of the pelvis, and which seemed to be a part of the general mass above described. This patient suffers much from her disease. At times the bladder and urethra are so compressed that urine cannot pass. At times the rectum is obstructed. The result is most severe pain and distress throughout the abdomen. The trouble here is spasmodic, and at times exactly resembles violent colic. In the intervals of these attacks she was able to do some work in a family, to walk the streets, &c. She had for some time been engaged to be married. A desire had been manifested to have the engagement broken off. I was consulted. I gave an opinion decidedly in favor of the measure ; and had there been a legal question raised, I should have felt it my duty to state that such an "impediment" (I use the word in its ritual technicality) existed as made the state of marriage improper. I remembered well a case of recent marriage, in which the husband desired my advice on account of important disease, not known to exist before marriage. I discovered that a tumor absolutely filled the whole cavity of the pelvis, and which, if it continued to grow, would in no long time be seen externally.

I began an active course of treatment very soon after I saw this case of E. L. The diet was regulated, so was exercise and rest. Iodine ointment was constantly applied over the whole extent of tumor ; and sol. mur. lime was steadily given. She took of this larger doses than has any other patient to whom I have prescribed it. The dose amounted at last to about three hundred drops, three times a-day. Leeches were used whenever pain existed in the tumor, and occasionally counter-irritation was employed. This course was persisted in for a long time. The tumor gradually diminished. This was ascertained by careful admeasurement. The strength returned. She gained flesh. She has for a long time passed from my professional care, but I occasionally see her, and always learn that she has no complaint. I have made no examination for a long time; but I feel sure that if the disease had become active again, I should have known it.

Remarks.—Mrs. K.'s case, No. IV., occupies a large space in this record. It was a case of much interest. It involved some important principles. Are we authorized to operate in such cases ? How far are we to be influenced by our patient in deciding such a question ? Here was entire faith in what was to be done. It was faith in it as the only means of life—offering the only chance, however faint, that was of good. It was associated with an intense desire to live. The disease, called by C. M. Clarke and others malignant, has within a few years been successfully treated by ligature. The immediate effect of ligature in this case was good. It lengthened life, and made

life comfortable. I do not recollect a circumstance in this case which brings with it any regret that the operation was done. A question has been asked above, how far shall the physician be influenced in his judgment in treating disease by the demands, or wishes of his patient? As a rule, and the demand existing by itself, there being nothing in the case which promises good from any known agencies, he is not to be influenced at all by the wishes of his patient. But cases do occur which form, or are regarded as exceptions to the rule, and the physician is, and will be, governed by them. I remember, when a hospital pupil, a sailor entering the hospital for an affection of the heel which renderd him perfectly useless, and for years, under all sorts of treatment, had made him a great sufferer. He came to have his leg cut off. He had hobbled over the country, and applied for the *radical* treatment in vain. His leg, heel, foot, all, had not the slightest appearance of disease about them. His demand was heeded, his request granted, and he had the operation done with apparently as little suffering, certainly with as little complaint, as if he had been under the fullest power of ether.

I remember another case. It occurred in Scotland. An unmarried woman had a swelling of the abdomen of great size. It troubled her extremely. It did so principally in preventing her getting employment, she being supposed pregnant. This was a sore charge, and most grevious in its consequences, for she depended on work for her living. She roamed about to have an operation done on the abdomen, by means of which a large tumor, which surgeons regarded her trouble to be, might be removed. She applied in vain, till at length Mr. Lizars, then of Edinburgh, consented to do the operation. An incision was made of great extent, into the peritoneal cavity. ***But no tumor was found.*** The abdominal intumescence was owing entirely to a very large deposit of fat in the walls of the abdomen, and a very fat omentum.

In deciding the question of an operation in the cases referred to, the surgeon acts upon his own responsibleness, and his sense of this must determine for him what the practice must be.

A word more. In cases V. and VI., of polypi of the womb, it is said that pain was complained of when the ligature was tightened, and that soreness of the abdomen followed. The same was said of tightening the ligature in Mrs. K's. case. Now these three tumors are *insensible*, wholly so, certainly were they in the cases referred to. Whence, then, the pain? I have already answered this question, by supposing that it happened from the nearness of the ligature to the proper substance of the womb itself. The tumors had no pedicles. They sprung from broad bases, and the ligature was applied very near to the base. The womb, though no portion of it was included in the ligature, did receive pressure from the ligature applied so near to it. Now it is not important that the ligature should embrace polypi round the pedicle, or very near the base, especially in cylindrical or globular polypi which have no pedicle. If the ligature be applied at such a distance as not at all to affect the womb, the *whole of the*

tumor will drop off, just as does the whole of the umbilical cord, let us leave what amount we may adherent to the abdomen.

But if the pain on tightening the ligature be such as to attract regard—if it be accompanied by the constitutional or local symptoms of uterine or peritoneal inflammation, slacken or remove it at once, and treat the disease it has produced at once with appropriate remedies. When applied again, select a spot more distant from the womb. Make the pressure less severe if pain again accompany it. If there be no pain, make it firm enough to strangulate the tumor at once, or as far as may be, as less constitutional trouble is apt to arise from such an operation, than from a less perfect and positive one.—*Boston Med. and Surg. Journ.*

Prosecutions for Mal-Practice in the State of New York.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—I saw, by a notice in a late No. of your Journal, that a physician in Delaware County, of this State, had been prosecuted for mal-practice in the treatment of a surgical case. Perhaps a brief history of the case, treatment and result, in connection with another of alleged mal-practice in surgery, disposed of last week, in the Washington County Circuit Court, may not be uninteresting, if not instructive to the medical profession.

In giving the report of these cases publicity in a widely-circulated medical journal, I trust the public interest may be subserved, and the junior members of the profession benefited. I desire not to wound the feelings of any professional man; and shall, therefore, avoid giving the names of the physicians charged with the mal-treatment of the following surgical cases.

Some time about the 11th of September, 1845, two young men, both "*posse men*," or in the employ of the State, during the late anti-rent difficulties, were wrestling; one of whom was about to be thrown upon the ground, and in the act of falling, thrust out his left hand, which met the ground rather outwards and backwards from his body, receiving not only the weight of his own body, but in all probability that of his antagonist; which resulted in a fracture of the external condyle of the humerus, and a backward dislocation of the ulna. In fifteen or twenty minutes after the receipt of the injury, the patient was placed in the hands of a young physician, who, I believe, regarded the accident a backward dislocation of the elbow.

By the testimony it appeared that he attempted to reduce it, by directing one person to make use of counter-extension from the humerus, midway between the shoulder and elbow, and another individual was directed to extend upon the fore-arm, by grasping the limb at the wrist; while the physician, by the aid of his own hands, endeavoured to crowd the articulating extremity of the humerus, situated in what should be the hollow of the arm, backwards. The extension and counter-extension was applied while the limb was in the *extended* or *straight* position; and after the application of considerable force, for some little time, there was an apparent yielding, when the physi-

cian would direct the limb to be slightly flexed, which twice resulted in something like a "chuck backwards." At last, on a third trial, extension and counter-extension was applied as in the other two instances, and the limb left nearly in the straight position, with little or no effort made to flex it. It was pronounced reduced; and the patient thought "it felt more like an arm." The degree of flexion can be pretty accurately estimated, when it is stated, that in order to make a sling sufficiently long to suspend the limb over the opposite shoulder, it required, or, at least, two handkerchiefs were tied together, and used in the ordinary way.

The physician saw the patient from time to time, for about thirty days; and up to near this period, said that "it was all right, or as near as it could be, except a little point of bone or process, which would come right by using the limb."

At the end of seven or eight weeks, the patient called on me at one of our Saturday cliniques at the Albany Medical College, with his elbow swollen, stiff, and in nearly the straight position. The lower end of the humerus could be felt quite distinctly at the fore part of the joint, and the olecranon projected unnaturally behind; in short, the ulna was, at that time, dislocated backwards. I made a vigorous, though unsuccessful, attempt to reduce it. In the great exertion employed to flex the limb, and the effort to dislodge the coronoid process from the olecranon fossa, the extreme point of the olecranon process gave way. The fore-arm, however, was brought to something more than a right angle with the arm, which would have been in a much more useful position, if, as we anticipated, a joint but little better than anchylosed, should be the result. By neglect on the part of the patient, and by the weight of the fore-arm, the limb at length returned to a state but little more flexed than at the time when I first saw it, and thus remained stiff and inflexible.

In something less than a year after the accident, the young man, by the advice of his friends (not medical,) commenced a suit for damages; charging, in his declaration, that the joint was then dislocated; that it had never been reduced, and consequently that he had, in a great degree, lost the use of his limb. That a backward dislocation of the ulna existed at the time of the trial, neither the defendant nor witnesses pretended to deny, and that a great share of the difficulty and loss of the use of the limb was to be attributed to the dislocation.

The counsellor for the plaintiff endeavoured to show, that the malpractice consisted in the fact, that the defendant did not make use of the most common and best means to reduce the dislocation; and that no evidence, at the time of the attempted reduction, was had, to show that the dislocated bone had been replaced.

One of the first questions put, on the part of the prosecution, was, "What is the present condition of the elbow-joint of the plaintiff; and what was the original nature of the injury?" All agreed, that there was a fracture of the external condyle, which presented its proper relation to the head of the radius, and that there was a dislocation of the ulna backwards. Some of the witnesses thought that the

coronoid process of the ulna was broken off; and others, that the fracture, which carried away the external condyle, extended through the trochleal articulating surface of the humerus, so that by the action of the muscles, the coronoid process (provided that it was not broken off) was drawn, as it were, between the fragment and the continued shaft; or, in other words, that the articulating surface of the humerus was not sufficiently broad to sustain the ulna, after having been brought into its proper place. These two points, together with a feeble attempt to show that the patient had been imprudent in walking about too soon; in permitting a friend or nurse to dress it; and in riding on horseback, constituted the chief grounds of the defence.

On the part of the prosecution, after inquiring into the condition of the limb, nature of the accident, &c., the question was asked, "What is the evidence of reduction of a dislocated limb or joint?" All the witnesses, both for prosecution and defence, replied, "restoration of the form and shape of the joint, and freedom of motion.

The next question asked, was concerning the proper mode and means to be employed in reducing a backward dislocation of the ulna; and without a single exception, all replied, that it would be proper to apply extension and counter-extension while the elbow was in a *flexed* position. This principle was too *obvious* to be denied, or controverted, from the clear and conclusive demonstration made by the aid of the os humeri and ulna. By flexing the joint, the coronoid process was brought out, and forward from the deep olecranon fossa; and by extending it, it was made to lock into the deep olecranon fossa, and there retain its hold with great firmness.

The book authorities, with the exception of a single case given by Sir. A. Cooper, in his work on Dislocations, direct that the limb should be *flexed*, as by bending the joint around the knee, or around a bed post. It was agreed by all the medical witnesses, that if the limb was *flexed*, and, at the same time, if a *separating* force were applied to the extremities of the two bones involved in the dislocation, whether by the hands, or in any other way, such a dislocation as that under consideration might be reduced.

Another question asked the medical witnesses, was this: "If the coronoid process be broken off, would it not be proper, and the authorized practice, to place the limb in the extended position; or would it be correct practice for the treatment of the fracture, especially if there had been a backward dislocation of the ulna?" The question was also asked, "Should the limb be placed in the *semi-flexed* or *flexed position?*" To the former question all answered in the negative; and to the latter, the same reply was made by all the physicians, with the single exception of a young man who was then practising dentistry, and who testified that he was a graduate in medicine; had attended lectures in New York; and had there received instruction in the lectures of the Professor of Surgery to treat fracture of the coronoid process of the ulna, by placing the elbow-joint in the *semi-flexed position.*" I find no authority for this practice in any surgical work with which I am acquainted; nor have I learned that

such is the doctrine taught in any other medical institution out of the city of New York. Perhaps the young surgeon might have been mistaken, or misunderstood the direction of his teacher. If so, I presume that the distinguished and able surgeon of New York, under whose instruction he claimed to have received such direction, will notify him of his mistake, and put him right upon this important principle.

Another question put on the side of the prosecution, was this. "Provided the coronoid process be broken off, and the ulna dislocated backwards; and provided, also, it had been reduced, in which position, whether in the *extended* or *flexed*, would the ulna be most likely to remain in its proper place?" Here, too, the universal answer was, "in the flexed position."

The above are the most essential and important facts as developed on the trial, by candid and fair witnesses; and the result was a verdict for the plaintiff of $450.

The prosecution was conducted in a most scientific and able manner by A. Tabor, Esq., of this city, assisted by the Hon. Mr. Wheeler, of Delaware County. Mitchell Sanford, Esq, of Greene County, conducted the defence, assisted by A. Parker, Esq., of Delhi. Mr. Sanford, who addressed the jury, displayed his usual tact, ingenuity and eloquence, in endeavouring to convince the minds of his hearers, that the young physician had neither done wrong, nor had neglected to do any thing that ought to have been done.

The Hon. Amasa J. Parker, of this city, the Circuit Judge, before whom the cause was tried, gave a brief, though clear and impartial charge, stating that the jury were to be governed by the law and the facts in the case before them. The principle of law, applicable to the case under consideration, was fully explained; and as the testimony to the facts in the case was so fresh upon the minds of the jury, he deemed it altogether unnecessary to repeat it.

In most of the prosecutions of physicians and surgeons for mal-practice, it is fair to presume, from a pretty extended observation, that they originate in, or grow out of, an unwarrantable rivalry, or perhaps jealousy, between two neighbouring practitioners. In this case no such cause existed; on the contrary, it would seem as though all the medical profession, who testified on either side, were willing and anxious to protect the defendant, and the medical profession, so far as they could consistently with the solemn responsibilities of an oath resting upon them.

The report of the Washington County suit for mal-practice, may be expected next week. ALDEN MARCH.

Albany June, 1847.

Accounts of a New and Fatal Epidemic that Prevailed Recently in Mississippi and Tennessee. By B. J. HICKS, M. D., of Vicksburg, Miss., and B. F. TAYLOR, M. D., of Whiteville, Hardeman County, Tennessee.—(It is a remarkable coincidence that we should have received about the same time the following communications, evidently

describing the same curious disease, as it prevailed at localities nearly 300 miles apart. It will be seen that Dr. White gives no name to the strange affection; whilst Dr. Hicks calls it *myelitis petechialis.* We are satisfied it is the *cerebro-spinal meningitis*, which prevailed during the last year in Ireland and some parts of Europe—an interesting account of which may be found among our Foreign extracts in the present number, taken from Ranking's Half-Yearly Abstract, vol. 2, No. 2, p. 192. Upon enquiry, we learn that several cases of a similar nature were seen in this city in the early part of the spring; and on reflection, we are inclined to think it was the same disease that killed so many of the 2d regiment of Mississippi Volunteers as they passed through this place in January last. We think it evident that neuralgic and spasmodic affections have increased greatly in the south within a few years past.—EDS.)

Editors of the New Orleans Medical and Surgical Journal.

GENTLEMEN:—In the neighborhood of this village we have had an epidemic that has proven to be one of the most formidable, probably, in the records of medicine. It appears to have been more prevalent near Hatchie river, than in any other section of the country. The disease has been confined principally to children between the age of six and fifteen years. The attack is ushered in with cold chilly sensations, after which moderate heat of surface, pain commencing between the shoulders, extending to the occipital region, rigidity of the posterior cervical muscles, retracting the head considerably backward, as in *tetanus.* Delirium supervenes in an hour or two, contraction of the pupils of the eye, dilatation of the one eye sometimes, with contraction of the other, ptosis of the eyelids, ecchymoses under the eye and on the body, rigidity of the abdominal muscles, spasmodic twitchings of the flexors of the extremities, and a disposition to keep the legs in motion from side to side alternately. A difficulty in expanding the lungs, breathing through the nostrils principally, constipation of the bowels, and sometimes retention of urine. Stertorous breathing comes on, and death soon closes the scene—such are the general symptoms of the disease. It terminates its course in from fifteen to seventy-two hours. I have known one case to terminate as late as the twelfth day.

Almost every method of treatment has been devised and carried into effect; bleeding, emetics, cathartics, cold douche, cupping, mercurials, blisters; after which opium, quinine, and stimulants. The system appears to be so excessively shocked that the recuperative powers are not sufficient to sustain the tottering fabric. The necessary chemical change is not carried on in the lungs; the blood is not decarbonized; consequently, from the phenomena manifested, we are led to the conclusion that death is produced principally by *asphyxia.*

I will simply detail one case, the particulars of which will be found highly interesting, illustrating clearly and conclusively the pathology of the disease.

Case.—I was called in consultation with my friend Dr. Durham,

an old practitioner, in the night of the 30th March, to see a servant girl, aged 11 years, the property of John H., Esq. She was taken on Sunday evening, the 28th, and was seen the following morning by Dr. Durham. She was then delirious, conjunctivæ injected, pupils contracted, retraction of the posterior cervical muscles, twitchings of the flexors, rigidity of the abdominal muscles, hurried respiration, pulse full, but compressible, constipation of the bowels. A mercurial cathartic was ordered, and a blister to the nape of the neck, extending over the occipital region.

29th. Delirium ceased; there is still retraction of the muscles; medicine produced two evacuations; has passed a small quantity of urine; says she feels better. Ordered calomel and pulv. doveri.

30th. This evening I saw her the first time. Intellect clear, complains of pain in the hypochondriac region, retraction of posterior muscles, pupils contracted, the eye looks rather dull, tenderness on percussing the 2d and 3d dorsal vertebræ, restlessness, pulse quick and compressible, no fever, tongue of a dull red or purple colour around the borders, coated with a thin yellow fur and fissured, respiration quicker than natural, performed principally by the abdominal muscles, dulness on percussion over the right hypochondriac region, auscultation detected slight engorgement of the lungs, no purgative since yesterday. I advised that she should be cupped over the spine pretty extensively, and to have an active mercurial cathartic.

31st. The cupping relieved the muscular retraction; skin feels pliant, though there is increased heat of the scalp. In the course of the night it was thought proper by Dr. Durham to administer ʒi. tinct. opii camph. to relieve excessive abdominal pain. Bowels not moved; the anodyne had the desired effect. She says that she is better. Ordered ol. ricini and ol. terebinth., to be repeated in four hours, should it not operate.

When we were in the act of leaving, the mother came out from the cabin and desired us to come back and see her, as she was much worse. She stated that the patient had asked for a drink of water a few minutes previously, complaining on lying down of pain in the abdomen, and evacuated her bowels in bed. The pupils were contracted, pulse depressed, breathing stertorous. Death closed the scene in a few minutes.

I examined the body in presence of Dr. Durham, and the following were the appearances.

Sectio. Cadaveris, 18 hours after death.—The body was not thin, and there was a quarter to half an inch of fat covering the abdominal muscles.

Head.—The posterior integuments were swollen, both pupils were dilated. On removing the calvarium, a considerable amount of blood flowed from the sinuses of the dura mater. The arachnoid membrane adhered with moderate firmness to the surface of the convolutions.

While the brain was being removed, some two or three ounces of serum escaped from the ventricles, being a clear and transparent

colour. The weight of the brain was not ascertained, but it appeared heavier than usual. The surface of the convolutions was much flattened. The base of the brain bore evident marks of inflammation. The membranes covering the medulla oblongata and the cerebellum, the right lobe more especially, were thickened and opaque, adhering likewise pretty firmly to the fissures of Sylvius. The membranes at the base were unusually vascular, but the substance of the brain itself was not altered very much in colour or consistence. The membranes, more particularly, around the third nerve of the right side, were thickened and more vascular than natural. On examining the superior surface of the brain and separating the two hemispheres slightly, they gave way inferiorly. This was ascertained to arise from softening of the lower part of the middle lobe of both hemispheres, as also a considerable portion of the corpus callosum. The corpora striata were very slightly injected and softened, particularly that of the right side; the lining membrane of the ventricles was not altered in colour. The brain, taken as a whole, excepting the parts mentioned, was natural.

Spinal Marrow.—On sawing the vertebræ, a considerable quantity of fluid blood gushed out the moment the interior of the canal was reached. It appeared to be perfectly flooded and engorged. The membranes were evidently thickened and highly vascular. The spinal marrow was not altered in appearance, but, if anything, softer than natural. The substance itself was not injected.

Thorax.—On inflating the lungs, the cells were permeate throughout. There was no appearance of hyperemia or inflammation of the substance, or of the lining membrane.

The Heart contained within the ventricles a thick coagulum of blood. The pericardium being cut through, about two ounces of serum escaped. The valves were healthy and the artery was free from deposits.

Abdomen.—The liver was perfectly engorged with blood; an incision being made through its structure, the blood could be squeezed from it as from a sponge. The gall bladder was distended and contained a quantity of thick, black, bilious matter. The weight of the liver was $5\frac{1}{2}$ pounds.

The Kidnies were congested, but otherwise healthy.

The Spleen was large, but contained little blood in comparison with the liver.

The Intestines contained a quantity of thin greenish matter. There were a few spots of ecchymoses in the lower two-fifths of the ilium. The small intestines contained a few large worms. The alimentary canal was otherwise throughout healthy. *The bladder* bore no mark of disease.

Such are the facts and history of one of the most malignant diseases that it has been my lot to witness.

I forbear making any remarks, as I have, I fear, trespassed upon your columns already too much.

Very respectfully,

Whiteville, Tenn., April, 1847. B. F. White.

(In reply to a note requesting further particulars, the following were received from Dr. White.—Eds.)

The disease made its appearance on the 25th day of February, near Hatchie river. The region of country extending along Hatchie, from Bolivar to Estanaula, was the only section that was affected. No case that I am aware of, occurred more than six miles out from the river. Some fifty cases that I know of, have occurred. The ratio of mortality in my practice, has been three-fourths out of the whole number. Every case that was taken with the extreme violent symptoms mentioned, died. Towards the last, the disease lost its malignancy to a certain extent, like all epidemics. However, the last two cases that I saw, died. The first of these demonstrated the futility of the antiphlogistic, with the sedative plan. In the second case, no time was afforded for any plan of treatment. The system received such a shock that it could never recuperate. The following were the notes taken at the time.

Miss Nancy E., aged 15 years, taken on Sunday evening, April 4th; complains of pain between the shoulders; spasmodic retraction of the posterior cervical muscles; subsultus tendinum; pain in the head and limbs; delirium, with intervals of consciousness; some fever, face flushed, bowels acted once during the day. April 5th, Monday morning, complains of pain of the stomach, with occasional sickness; slight delirium. Family gave an emetic; acted pretty thoroughly; delirium relieved; bowels evacuated; took a dose of calomel. I saw her first on Tuesday morning, 6th April, and found her in the following condition: head elevated on pillows; complains of an intense pain in the forehead; pulse hard and pupils contracted. On percussing the spinous processes, there was found to be tenderness, more particularly over the 2d and 3d dorsal vertebræ; tenderness on pressure over the right hypochondriac region; tongue covered with a thick yellow fur, fissured and dry; breath offensive. Bled her to ℥xvi, took ten ounces of blood by cups from the spine. A blister to extend from the neck, over the spine to the sacrum. Proto-chlor. hyd. grs. x, acetate morph. gr. i, for a powder. A cold douche over the head. She has now fallen to sleep. To take sulph. magnesia, 1 oz. in four hours, should she be not evacuated. Wednesday, 7th. I saw her this morning at 2 o'clock; still complains of pain in the head; pulse 75; bowels have acted freely; rational; no subsultus; pupils still contracted, Ordered a cold dash over the head, venesection to ℥xviii; to take proto-chlor. hydr. grs. x, acet. morph. gr. i, followed in four hours by a dose of sulph. magnesia. In my absence, a professional friend was called at 2 o'clock, P. M. He prescribed a dose of calomel with morphia. I saw her at ten o'clock at night. Head relieved, very little fever, small red spots, not unlike ecchymoses have appeared under the left eyelid, and over the body. To have two drops croton oil, repeated in two hours, should the bowels not act freely. Thursday, 9 o'clock, 8th April, complains of her head, great restlessness, sighing; pulse 100. Bowels were evacuated freely, discharges dark and very offensive. Stertorous breathing came on, and death took place at 12 o'clock.

In reviewing this case, you probably may be led to believe that the opium brought on the stertorous breathing, and that the treatment was sufficient to have produced death. I have seen precisely the same thing occur where no narcotic was given. The fact is, that I had almost lost confidence in any therapeutical agent. In those extreme cases, nothing appeared to be of any service. If any remedy is of any service, it is most unquestionably the preparations of opium.

I may remark, that in some of the cases that survived, the hearing was not restored for some time. The function of taste also, was lost. In one little child I recollect that he could not tell any thing bitter from any thing sweet. Every thing was devoured with the same gusto.

Yours, &c.,

Whiteville, May 18th, 1847. B. F. White.

To the Editors of the New Orleans Medical and Surgical Journal.

Gentlemen:—Conceiving it to be the duty of every medical philanthropist to contribute his mite towards the advancement of a science whose object is the relief of human suffering and prolonging life, I transmit to you for publication, if deemed worthy, the following observations upon a disease of most extraordinary character, which has lately prevailed in our city, to a moderate extent, but with great fatality. I submit them as taken from the bed-side of the sick, leaving the readers of your Journal to draw their own conclusions. When the disease first made its appearance, with what industry and zeal did the physicians of our city search the medical periodicals for half a century back, in order that they might receive some light as an inheritance from the experience of our predecessors, to aid them in the diagnosis and treatment of this fatal malady, but in vain; hence, I offer no other apology for this communication, hoping it may serve in a slight degree as a beacon, to aid some traveller through the dark mazes of our profession, and to shun the errors which have often prevented success.

The disease of which I speak, I shall call *myelitis petechialis*, as the meaning of the terms will convey an idea of the most prominent symptoms.

The patients were attacked with groaning, muttering delirium, chilly sensations, pallid countenance, extremities cold; which symptoms were soon followed by roving restlessness, flushed countenance, frequent pulse, expression of the eye wild and frantic, surface of the body hot and dry, violent screaming when touched or spoken to, unable to answer questions correctly, to locate the pain or point out the suffering organs; whilst sleeping, alternate pallor ond flushings of the countenance were often observed, and violent inflammation of the right or left eye was not an unfrequent occurrence. This condition was followed on the second or third day of the disease with symptoms of tetanus, the spinal muscles being very much contracted and rigid; in some instances to such an extent that the patients were

enabled to swallow even fluids with much difficulty, accompanied with a loss of power in either the right or left upper and lower extremities, followed by convulsions of great severity, which would be excited or called into action by touching or raising the inferior extremities as quick as the operations of a galvanic apparatus. During the existence of this disturbed state of the nervous organism there was no evidence of lesion existing in the biliary or digestive organs, but great activity of the urinary secretions, being unnaturally copious and pellucid.

There was no uniform rule for the appearance of the various symptoms in this disease; in some instances the tetanic symptoms were observed as early as the first day of the attack, and in other cases as late as the tenth. In many of the violent cases, within six hours after the patients were taken ill, *petechiæ* of large size made their appearance upon the arms, over the eyelids and upon the inferior extremities, as if a violent hemorrhagic effort had been made and the blood arrested under the cuticle. These *petechiæ* disappeared on the 4th or 5th day, if the patients were not sooner cut off. In the most violent cases, death ensued on the 5th day of the disease; in other instances they survived from thirty to fifty days; but few cases recovered after the symptoms of tetanus presented themselves.

In consequence of a doubt existing in regard to the pathology of the disease, the treatment was pursued with a cautious and timid hand. The stimulating and anodyne course of treatment did not avail, and bloodletting was equally unsuccessful. The course which was of most promise, was of a mixed character. In vigorous constitutions, blood-letting in the onset of the attack, followed by an active mercurial cathartic, was of great service. If the patient should be of a more delicate constitution, cupping the whole length of the spine and early vesication by the use of the newly invented blistering tissue, or the unguent cantharides, would be preferable to the general bleeding; revulsives to the extremities and iced cloths to the head, together with the internal exhibition of the following mixture, greatly aided in advancing the case.

℞ Pulv. gum. camph. ʒj.
Potassio tart. antimonii, grs. ij.
Mucilage gum. acaciæ, ℥vi. M.

Give one tablespoonful every two hours. An enema composed of ʒij. spir. terebinthinæ, ʒij. tr. assafœtida and a half pint of thin starch was administered morning and evening, with a view of tranquillizing nervous distress, and keeping the bowels gently open.

After the violence of the disease had abated, the most beneficial tonic for relieving the inertia of the nervous system, which occurred in every instance of recovery, I found to be the following.

℞ Iod. ferri. ℈j.
Iodine, grs. viij.
Iod. potassæ, ʒij.
Syr. sarsapar. ℥iv.

Give one teaspoonful every four hours in a little water. This pre-

scription should be continued for some days, unless found to produce gastric distress; then some mild bitter vegetable infusion should be substituted.

The pathology of this disease may be stated in a few words. The brain and spinal marrow being the great centre of the nervous system, any injury done to its substance by mechanical violence or otherwise, must necessarily derange the functions of all of the organs of the human machinery which depend upon their sane condition for the healthful elimination of the vital fluids and the depurative processes that are necessary to keep the organism in a condition suitable for the purposes of maintaining the proper operations of the whole; and when such important functions are so interfered with, the tendency is consequently to a cessation of that nervous power or excitation which is necessary to carry on the operations of vitality.

In the disease in question, there is a positive injury existing within the spinal canal; congestion and inflammation of the spinal marrow and its membranes, which, if not speedily arrested, terminates in softening of its substance, which must be necessarily fatal. This condition of the spinal marrow has been produced by the sudden operations of meteorological changes made upon the nervous expansions of the skin, which impressions are transmitted to the opposite extremity of the nervous apparatus through the medium of the nerves themselves, they being the natural conductors of sensations, at which point morbid action is excited and continued until lesion takes place, if not prevented by timely treatment. The pathology of nervous diseases has been too much neglected; the operations of the nervous system are much modified by the electrical condition of the atmosphere, and the treatment of this particular class of diseases will be unsatisfactory until more attention shall be paid to this particular study. The nervous system is more involved in the diseases of our climate than has been conceived of by medical writers. In intermittent fever we may bleed, blister and give alteratives, and we cannot cure the disease until we administer some remedy that will break up the morbid chain of nervous action, and keep up a proper equilibrium of the vascular system. What is the first organ upon which diseased action locates itself in the fevers of our miasmatic district; is it not the expansions of the nervous system? Do we not see shivering, and manifest derangement of nervous action before congestions of the spleen, liver and other organs take place, and the consequences attendant upon such conditions? Should the energy of the nervous system be of sufficient force, the equilibrium of the circulation would be maintained and no congestions could ensue.

B. J. Hicks, M. D.

March 31st, 1847. Vicksburg, Miss.

(In reply to a note requesting farther particulars, the following letter was received from Dr. Hicks.—Eds.)

Vicksburg, May 11th, 1847.

Gentlemen:—Yours of the 7th instant, has just come to hand.—The disease I gave you a partial account of under the head of *myelitis petechialis*, made its appearance in our city and its vicinity about

the 10th of January last, and continued until the close of March; during which time between forty and fifty cases occurred, at least one-half of which proved fatal. No case to my knowledge recovered after decided symptoms of tetanus presented themselves.

Only one opportunity occurred in my practice of making a post-mortem examination, which, on account of press of business, was a hurried one, and consequently no organ was examined, except the brain and spinal marrow.

The cerebrum and cerebellum showed no symptoms of inflammation. The medulla oblongata and upper portion of the spinal marrow presented dots of blood when cut into, and the meninges of the same were found to be highly injected. I regret that I did not make a more perfect examination of this case, as no subsequent opportunity presented of investigating the pathology of this interesting disease.

Yours, &c.

B. J. Hicks.

On Exudation.—Its Development.—By John Hughes Bennett, M. D., F. R. S. E., Lecturer on Pathology, and the Practice of Physic; Director of the Poly-Clinic, at the Royal Dispensary, Edinburgh, &c.

Enclysted Growths.—The different crypts and follicles of the skin, and mucous membrane, as well as several of the excretory ducts of internal organs may become obstructed, and as a consequence enlarged and hypertrophied. It is true such growths usually consist of one or more elementary tissues, and should not on this account be constituted a class of themselves. Their importance in a practical point of view, however, as well perhaps as the difficulty of knowing where to describe such compound growths, warrant our speaking of them under a separate head.

Encysted growths are composed of a cyst or membranous envelope, enclosing various kinds of contents. They differ greatly in size, situation and structure, which renders their arrangement somewhat difficult. By some they have been divided into *simple* and *compound*, according as the tumour is formed of one cyst, or is composed of several. By others they have been arranged according to the nature of their contents into *hygromatous*, or aqueous; *atheromatous*, resembling gruel; *melicerous*, honey-like, and *steatomatous*, or fatty encysted growths. The latter mode of division is very faulty, the atheromatous, melicerous, and steatomatous varieties being all more or less fatty, whilst some kinds of compound encysted tumours contain different contents in different cysts. But as there can be no doubt that the peculiar contents give to these growths a distinctive character, we shall first speak of them as simple or compound, and then describe their different kinds of contents.

Simple encysted growths.—These growths are formed of a cyst composed of fibrous tissue, lined by a smooth membrane. Sometimes the membrane is structureless, or only composed of areolar tissue. At other times it is lined with a distinct layer of epithelial cells, the nuclei of which are very apparent on the addition of acetic acid. The

former kind constitutes the vesicles so frequently found in the plexus choroides, kidneys, ovaries, &c., varying in size from a pin's head to that of a hazel nut, or even walnut, usually with aqueous contents. The latter kind constitute the cystic growths arising in the follicles of the skin, in the mamma, ovaries, testicles, &c., which frequently reach the size of an orange, are sometimes much larger, and vary greatly as to the nature of their contents. For the most part they are only sparingly supplied with blood-vessels, and seldom cause inconvenience except from the deformity they occasion when situated externally.

Compound encysted growths are of two kinds. The external sac may contain on its internal surface secondary or even tertiary cysts, which may be sensile or pedunculated—or the growth may be divided into numerous departments by divisions of the fibrous sac. This is the true multilocular encysted tumour. The external cyst in all these cases is formed of fibrous tissue. The internal surface is smooth, sometimes with, at others without an epithelial layer. The primary as well as the enclosed cysts are for the most part richly supplied with blood-vessels, and hence they are peculiarly prone to contain exudation which has undergone various kinds of development, as well as to ulcerate. These growths frequently attain an enormous size measuring several feet in circumference, whilst their internal membrane may secrete more or less rapidly gallons of fluid.

The *contents* of encysted growths are very various, and give, as we have previously stated, a peculiar character to them.

1. The contents may be a perfectly colourless fluid, resembling water, or the limpid serum so frequently secreted in the lateral ventricles of the brain. It is structureless, and chemically contains a minute proportion of salts, and a certain amount of albumen which coagulates on boiling. Such are frequently the contents of so-called serous cysts, or false hydatids of the plexus choroides, kidneys, ovaries, &c. A *hydrocele*, and other dropsies of shut serous sacs, may be looked on pathologically as constituting a form of hygromatous encysted growth.

2. The contained fluid may have an amber or golden yellow colour, and resemble the serum formed after the coagulation of the blood. It is still structureless, but contains a large amount of albumen, as is proved by the action of heat and nitric acid.

3. The contents are more or less gelatinous, sometimes slightly so, like weak gelatine—at others firm, capable of being cut with a knife like tolerably strong glue or firm calves-foot jelly. The colour of the gelatinous matter may vary from a slight yellowish tinge, to a deep amber, or brownish yellow colour. Sometimes this matter is structureless, at others it may be seen to contain very delicate filaments, combined with pale oval bodies, the outlines of which become stronger on the addition of acetic acid. This re-agent frequently causes the gelatinous mass to coagulate into a firm white fibrous structure, capable of being separated by needles, and presenting all the structure of filamentous tissue. This kind of contents is common in the ovary, and we have seen it in the kidney and other organs. On one occasion the

gelatinous matter in the kidney, contained numerous granules, and more than once we have found in the centre of clear amber masses of it a creamy white substance, either wholly granular, or in the process of formation into pus corpuscles.

4. The cyst may be distended with epithelial scales, which have evidently been thrown off from its internal surface, and become compressed together, and partially broken down. Hence on examination, clusters of such scales may be found mixed with numerous debris, and fat granules and globules, sometimes with crystals of cholesterine. The contents of the cysts are usually of a white or slightly yellow colour, which is sometimes fluid, at others semi-solid. The *molluscum contagiosum* of dermatologists is thus constituted. The small cystic swelling for the most part originate in the crypts of the skin, which are more or less enlarged.

5. The contents may consist principally of fat, either amorphous, crystallized, or organized, that is cellular. If amorphous they resemble honey, constituting the *melicerous* growths of morbid anatomists. In many cases, however, where the yellow colour is uniform, when it breaks down under the finger and closely resembles honey to the naked eye, faint cell walls more or less compressed together may be observed by the microscope.

At other times the fatty contents are of a whitish colour, occurring in masses of a pearly aspect and smooth surface, mingled with a roughened yellowish, and more granular fatty matter. This white matter consists of numerous crystals of cholesterine placed in a close juxta-position,—the granular fatty matter of oil globules and granules, mixed with broken up crystals, epithelial scales, and sometimes the products of fibrinous exudation. Such is the general structure of the *atheromatous* encysted growths of various authors.

Again the fatty matter may be more or less lardaceous in character, and consists of beautiful round or oval cells, some of which are distinctly nucleated. Mixed with these may be a granular matter, combined with epithelial cells or their debris. At other times no distinct cells can be observed, only a granular or amorphous mass, the most part of which is soluble in ether. This constitutes the *steatomatous* encysted growth.

6. Many encysted growths contain hair and teeth. The hair is occasionally inserted into the walls of the cyst, at others exists loose, mixed with the fatty or other contents. They are exactly of the same structure as the hairs in other parts of the body, having distinct bulbous roots. When attached they are surrounded by a follicle in the lining membrane, when loose they have been evidently grown in follicles, and afterwards become separated. Their apices are frequently split up into several fibres in the longitudinal direction. The *teeth* belong sometimes to the first, and sometimes to the second dentition. They present on section the usual structure of cavity, with ivory, enamel, and bone. Sometimes they are found embedded in a follicle of the lining membrane, at others like the hair quite loose.

7. Occasionally the cysts contain lymph, softened fibrine, and purulent matter, composed of plastic, pus, and compound granular cells,

the result of exudation into their cavities. Occasionally the serous fluid is more or less mixed up with extravasation of blood, giving to the contained liquid various colours and appearances, according to the period the extravasation has taken place. Thus it may be red, dark brown resembling coffee, of a dark greenish tinge, &c., &c. Sometimes it is of a dark bluish or blackish tint from excess of pigmentary deposit.

8. Sometimes the contents of the cystic growth are formed of a solid exudation, which has undergone the sarcomatous transformation as previously described, and wholly consists of fusiform cells. The exudation poured into such cysts may pass into the cancerous formation, when the characters we have described will be associated with those yet to be detailed which distinguish cancer.

9. Some cysts contain the peculiar secretion of the organ in which they are found. The cysts in the liver are full of bile, and those in the kidney of urine.

The mode in which encysted growths are developed is generally by the hypertrophy of pre-existing tissues, whereby canals are distended, follicles or vesicles enlarged, and their walls thickened. Thus the simple cysts in the plexus choroides are owing to effusion of serum into the areolar spaces of the villi of the membrane, and the subsequent distension of the membrane. Those in the kidney are owing to the distension of uriniferous tubes above an accidental obstruction, in the same manner that the whole kidney may become encysted from obstruction of the ureter. In like way the crypts of the skin or follicles of mucous membranes become obstructed at their orifice, and their contents accumulating, gradually distend the walls, which become enlarged and thickened. Simple cysts in the ovary become dilated by enlargement of the Graafian vesicles, either deep in the stroma of the organ, or on the surface, when they grow outwards and become pedunculated.

The origin of compound encysted tumours is not so well determined. It is very probable, however, that in most cases they consist of clusters of simple cysts, which become compressed together, and are at length surrounded by a capsule. They are most common in the ovary; and here we can readily understand how successive growths of Graafian vesicles may give rise either to the appearance of secondary or tertiary cysts, or to the multilocular form we have described. In all cases as the compound cyst enlarges, the internal ones open into each other by ulceration. Hence, in very old compound cysts we find one large cavity, with the traces on its internal wall of previously existing cysts, or bands and divisions, with pouches between them, indicating where previous cysts has existed.

Another mode in which compound cysts are formed is by the gradual enlargement of the areolæ in newly formed fibrous tissue. On examining thin sections of sarcomatous growths, we observe the filamentous tissue arranged in a circular form, enclosing spaces varying in size from the $\frac{1}{50}$ of a millemetre, to several inches in diameter. When of a certain size they are often lined by a distinct epithelial membrane, and many contain serum, blood, or exudation, either in a

granular or fibrous state. Such growths have long been known under the name of *cystic sarcoma.*

The diagnosis of encysted growths belongs to the *special* pathology of each organ affected by them, and will constitute the subject of a distinct communication. It need only be mentioned here that a knowledge of the structure of these tumours is not unimportant, as an examination of the fluids discharged from them frequently enables us to speak with certainty regarding their nature.

An acquaintance with the structure and mode of development of these growths must convince us that there are only two modes of *treatment* applicable—namely, 1st, entire extirpation, and 2d, destruction of the secreting surface in their interior. The idea that a dense fibrous envelope, often containing numerous secondary cysts, all richly furnished with blood-vessels can be absorbed through the agency of mercury, iodine, or any other drug, must be purely imaginary. Neither can it be supposed, that as long as any of the cysts remain intact, a cure can be hoped for. But we have seen that the natural course of these secondary cysts is to open into each other, until at length only one large cyst remains. Under such circumstances a rupture, by exciting adhesive exudation, and thus destroying the secreting surfaces, or inducing adhesions between them may cause a radical cure. It is in this manner that the occasional spontaneous removal of certain ovarian cysts are to be explained. In one such case, we had an opportunity of examining under the care of Dr. Makellar, the walls of the compound cyst were found after death shrunk and thickened, and the whole growth in process of obliteration.—*Monthly Journ. of Med. Sci.*

Principles of Treatment in Placental Presentations. By J. Y. Simpson, M. D., Professor of Midwifery in the University of Edinburgh.—In a late very interesting and very able paper, on unavoidable hæmorrhage, published in the Lancet for March 27th, I observed that the author, Mr. Barnes, argues on the idea that I recommended the complete separation and detachment of the placenta before the child, as a general rule of practice in all cases of placental presentation. Many other members of the profession appear to have taken up the same impression. I have always, however, maintained a very different doctrine. From the first observations which I published on the subject, up to the present time, I have upheld that the practice of detaching the placenta before the child, in unavoidable hæmorrhage, was a method to be had recourse to in cases where the other recognized modes of management were insufficient, or unsafe, or altogether impossible of application; and I have always looked upon this new method as possessing especial value, from its thus presenting to us a rational means of treatment in precisely those more formidable varieties of this obstetric complication, in which all former plans of practice were attended with extreme hazard or extreme difficulty.

As I am anxious to avoid future error and misconception on this head, I would beg leave here to take the liberty of enumerating briefly, and without entering into special details, the different general

principles of treatment which, in my humble opinion, ought to guide our practice in this important and anxious class of cases.

Setting aside, then, those minor and palliative measures for moderating the attendant flooding that are generally adopted by practitioners in all cases of uterine hæmorrhage, where time permits of their employment, (such as quietude, the supine position, cold, &c.,) I hold that our management of placental presentations, when either labour or such severe flooding as demands interference does at last supervene, should be regulated on the following principles:—

I. *In some cases no active interference is required.*—In placental presentations, we deem ourselves called upon to interfere operatively with the avowed object and purpose of saving the patient from the dangers of the attendant hæmorrhage. Hence it necessarily follows that it would not be requisite to adopt any special form of artificial aid or delivery, if, in any case or cases, this complication were accompanied with little or no flooding. Now, in some instances of partial presentation of the placenta, the flooding ceases altogether, or abates to a safe degree, when, during the natural progress of labour, the membranes rupture and the head descends. And in some rare cases of complete presentation of the placenta, where the vascular bleeding structure of the placental mass has become obstructed and obliterated previously to the supervention of labour, little or no hæmorrhage has accompanied the process of delivery. In other instances, before any operative aid can be applied, the hæmorrhage suddenly and entirely ceases in consequence of the placenta becoming totally separated, and expelled by the advancing head of the infant. Under such circumstances, and others, where the present or prospective dangers attendant upon operative interference would be evidently greater than the present or prospective dangers attendant upon the existing degree of hæmorrhage, any form of forced delivery would, I believe, be improper. But cases of placental presentation in which we can thus leave the delivery altogether to Nature are rare. Generally, we require to adopt some active measures, with the special object of saving the patient from the actual or threatened dangers of the hæmorrhage. These measures should, I conceive, be one or other of the plans which I have now to proceed to mention—viz., 1, the artificial evacuation of the liquor amnii; or 2, the artificial extraction of the child; or 3, the artificial separation of the placenta.

II. *Artificial Evacuation of the Liquor Amnii.*—In partial presentations of the placenta, rupturing the exposed portion of membranes (according to those principles that are generally followed in accidental floodings) is a measure which sometimes proves quite adequate to arrest or abate the hæmorrhage to such an extent, that the delivery may be afterwards entirely committed to the effects of Nature. Various old authors, as Daventer, Deleurye, and Astrue, have described this same plan of treatment as applicable to complete, as well as to partial presentations of the placenta, with this difference, that in the complete variety, the liquor amnii is evacuated, not by puncturing the membranes only, but by perforating the opposing placental struc-

ture with a trocar, catheter, or other analogous instrument. And the later records of midwifery contain several cases in which this perforation of the placenta has, in complete presentations of the organ, been successfully adopted, both as regards the mother and the infant.

Several high authorities, however, in midwifery, have altogether repudiated the evacuation of the liquor amnii, both in partial and in complete placental presentations. They have done so principally under the idea, that if this measure failed to suppress the flooding, the previous escape of the waters would render any subsequent practice that might be required more difficult of execution. This objection certainly applies to turning, as a subsequent practice, but it does not apply to artificial detachment of the placenta as an ulterior measure of treatment.

The artificial evacuation of the liquor amnii, by perforating either the placenta or membranes, affords assuredly a simple, but by no means a certain, method of restraining the flooding in placenta prævia. It is a practice which is undoubtedly attended with less success in unavoidable than in accidental hæmorrhage. But still I believe it to be a mode of treatment, to which we may occasionally have recourse with great advantage, especially if there is originally a large quantity of liquor amnii present, and if the flooding is great, while the os uteri is still small and undilatable. We must beware, however, of trusting too much or too long to this, or to any mere palliative measures. Whatever we do, should, if possible, be always done before the hæmorrhage is allowed to proceed to such an extent as to induce any very marked symptoms of constitutional debility and depression in our patient. If a decided state of exhaustion has been allowed to supervene, either of the two remaining and ulterior measures—extraction of the child, or extraction of the placenta—will be but too liable to prove futile and unsuccessful in their results.

III. *Artificial Extraction of the Child.*—This forms the general principle of management upon which unavoidable hæmorrhage has hitherto been treated by most authors and practitioners. The professed object of the practice is this: by forcing the delivery of the child, and thus emptying the uterus, the organ is thrown into full contraction, and hence further loss of blood prevented. The mode in which the indication is fulfilled is in some degree regulated by the state of advancement of the infant, its presentation, &c. In a great proportion of cases the accompanying hæmorrhage requires interference at so early a stage of the labour, that the only proper and possible mode of delivery is by the operation of turning; and various authors, as Drs. Denman, Burns, Hamilton, Conquest, and others, speak of turning as the *sole* and *only* mode of treatment applicable to cases of placental presentation. The great objection to it is the imminent danger which the mother necessarily runs, from the risk of some laceration of the cervix uteri during this mode of forcible delivery; and any degree of laceration of this part is especially dangerous in placental presentations; for in placenta prævia the structure of the cervix is extremely vascular, being permeated with those numerous and

enlarged vessels which are always developed, in a high degree, in the uterine walls opposite the seat of the placenta. The laceration of these vessels leads to immediate danger, from draining hæmorrhage after delivery, and to more remote danger, from inflammation being liable to spring up in the torn and wounded sinuses of this part, and extreme uterine phlebitis following as a direct consequence. But still I hold turning to be the proper mode of practice in unavoidable hæmorrhages which cannot be restrained by less active measures, and where immediate delivery is demanded, with the os uteri well dilated, or easily dilatable, and the child still alive, or presenting transversely.

Besides turning, other modes of artificial delivery of the infant are occasionally resorted to in placental presentations. If the attendant flooding is such as not to require forced delivery till after the waters are evacuated, and the head well advanced in the passages, then version would be dangerous and inapplicable, and the use of the forceps offers the safest and easiest mode of extracting the infant. Further: in original pelvic presentations extraction may be at any time effected, when required, by seizing and dragging at the feet of the child.

V. *Artificial Separation of the Placenta.*—The arrestment of unavoidable flooding by total detachment of the placenta should, I believe, be our line of practice when the combination of circumstances is as follows—viz., the hæmorrhage is so great as to show the necessity of interference, and is not restrainable or restrained by milder measures, (such as the evacuation of the liquor amnii;) but, at the same time, turning, or any other mode of immediate and forcible delivery of the child, is especially hazardous or impracticable, in consequence of the undilated or undeveloped state of the os uteri, the contraction of the pelvic passages, &c. Or, again, the death, prematurity, or non-viability of the infant, may not require us to adopt modes of delivery, for its sake, that are accompanied (as turning is) with much peril to the mother, provided we have a simpler and safer means, such as the detachment of the placenta, for at once commanding and restraining the hæmorrhage, and guarding the life of the parent against the dangers of its continuance. Hence, as I have elsewhere stated, I believe that the suppression of the flooding by the total detachment of the placenta will be found the proper line of practice in severe cases of unavoidable hæmorrhage, complicated with an os uteri so insufficiently dilated and undilatable as not to allow of version being performed with perfect safety to the mother: therefore, in most primiparæ; in many cases in which placental presentations are (as very often happens) connected with premature labour and imperfect development of the cervix and os uteri; in labours supervening earlier than the seventh month; when the uterus is too contracted to allow of turning; when the pelvis or passages of the mother are organically contracted; when the child is dead; when it is premature, and not viable; and where the mother is in such an extreme state of exhaustion as to be unable, without immediate peril of life, to be submitted to the shock and dangers of turning, or forcible delivery of the infant. This enumeration is far

from comprehending all the forms of placental presentations that are met with in practice; but it certainly includes a considerable proportion of the cases of this obstetric complication, and among them, all, or almost all, of the most dangerous and most difficult varieties of unavoidable hæmorrhage. In adopting the practice, one error, which I would strongly protest against, has been committed in some instances. Besides completely detaching and extracting the placenta, the child has subsequently been extracted by direct operative interference. If the hæmorrhage ceases, as it usually does, upon the placenta being completely separated, the expulsion of the child should be subsequently left to Nature, unless it present preternaturally, or the labour afterwards show any kind of complication, which of itself would require operative interference under any other circumstances. Both to detach the placenta and extract the child would be hazarding a double instead of a single operation.

Comparative Mortality attendant upon Turning, and upon the total Separation of the Placenta.—One circumstance which strongly led me to advocate, in unavoidable hæmorrhage, the preference of the detachment of the placenta to the operation of turning the child, was the fact of the great mortality which followed the latter operation, as contrasted with the few mothers that died when the placenta was spontaneously expelled, or accidentally extracted before the infant. In speaking of the relative maternal mortality resulting from the two modes of practice, Mr. Barnes very properly points out, that when I spoke of the mortality attendant upon the separation of the placenta before the child as amounting to one in fourteen only, (ten in 141 mothers having died,) I had included cases in which the placenta was thrown off spontaneously before the child, along with others in which it was artificially detached; and he doubts if the results would not be "widely different" if the statistics comprehended the latter class of cases only, "in which the severe operation of detaching the placenta, by the introduction of the hand, had been resorted to." The best answer to this objection consists in a statement of the results hitherto obtained from the practice of artificially detaching the placenta.

"Seventeen cases," says Dr. West, "have been recorded in the English journals, during the past fifteen months, of detachment of the placenta before the birth of the child in cases of placenta prævia. In the case recorded by Dr. Simpson, to whom it had been communicated by Mr. Cripps, the placenta was removed by an ignorant midwife, and ten hours elapsed before the child was born, during which time, however, no hæmorrhage took place. In sixteen out of the seventeen cases, the bleeding is said to have ceased immediately on the detachment of the placenta; but Dr. Everitt mentions, that although the flooding abated on the separation of the placenta, it did not entirely cease until after the application of cold externally; and he insists on the fact as proving, in cases of this kind, the hæmorrhage comes from the uterine as well as the placental ends of the lacerated veins. The life of the mother was preserved in every case but one, (out of the seventeen,) and then the previous hæmorrhage

had been so profuse as almost to exhaust the patient, who died three hours after delivery. All the children were still-born, except in the case related by Mr. Stickings."

I do not stop to inquire whether in one and all of these seventeen cases the artificial detachment and extraction of the placenta ought to have been followed. At present I adduce them, not as affording evidence of the propriety of the practice, but as affording evidence of its safety.

In proof of the maternal mortality under the old and recognised forms of practice being greatly higher than under the proposed plan of the extraction of the placenta before the child, Mr. Barnes refers, apparently with some hesitation, to the statistics collected by Dr. Churchill and myself, as showing that one in every three mothers was usually lost in placental presentations. Among 174 cases of unavoidable hæmorrhage collected by Dr. Churchill, forty-eight mothers died. I have now before me a carefully collected list of 654 cases of placental presentations reported by Mauriceau, Portal, Giffard, Smellie, Rigby, Clarke, and Collins, Schweighauser, Lachapelle, Drs. John and Francis Ramsbotham, Lee, Lever, and Wilson. Among these 654 cases, 180 mothers died, or one in three-sixteenths. In corroboration of the correctness of the statistical view which Dr. Churchill and I have taken of the extent of maternal mortality in unavoidable hæmorrhage, I would further beg to refer Mr. Barnes to the observations of Dr. Robert Lee. In his Midwifery Lectures, (pp. 370, 371,) published in 1844, Dr. Lee states a number of statistical facts regarding uterine hæmorrhage from placental presentations, and, amongst other matters, he mentions the result to the mothers in a considerable number of cases. I shall throw all his evidence on this last point into a tabular form.

Maternal Mortality in Seventy-two Cases of Placental Presentations noted by Dr. Lee.

Reporters.	No. of cases reported.	No. of mothers lost.
Dr. Clarke	14	1
Dr. Collins	11	2
Dr. Ramsbotham	19	8
Dr. Lee,	38	14
	72	25

Hence, according to Dr. Lee's collection of statistics, the maternal mortality in unavoidable hæmorrhage, amounting to twenty-five in seventy-two cases, is rather more than one in three. And this evidence of Dr. Lee will probably be regarded as the stronger, seeing that it is totally unprejudiced in its character; for in 1845, Dr. Lee called into doubt the accuracy of all collections of statistical data made by others, and which led to the idea, that the general maternal mortality in unavoidable hæmorrhage was so great, as to approach one in three. At that time he was, I believe, unaware of the general result of his own previously published collection of statistical data relative to the point in question.—*Lancet.*